

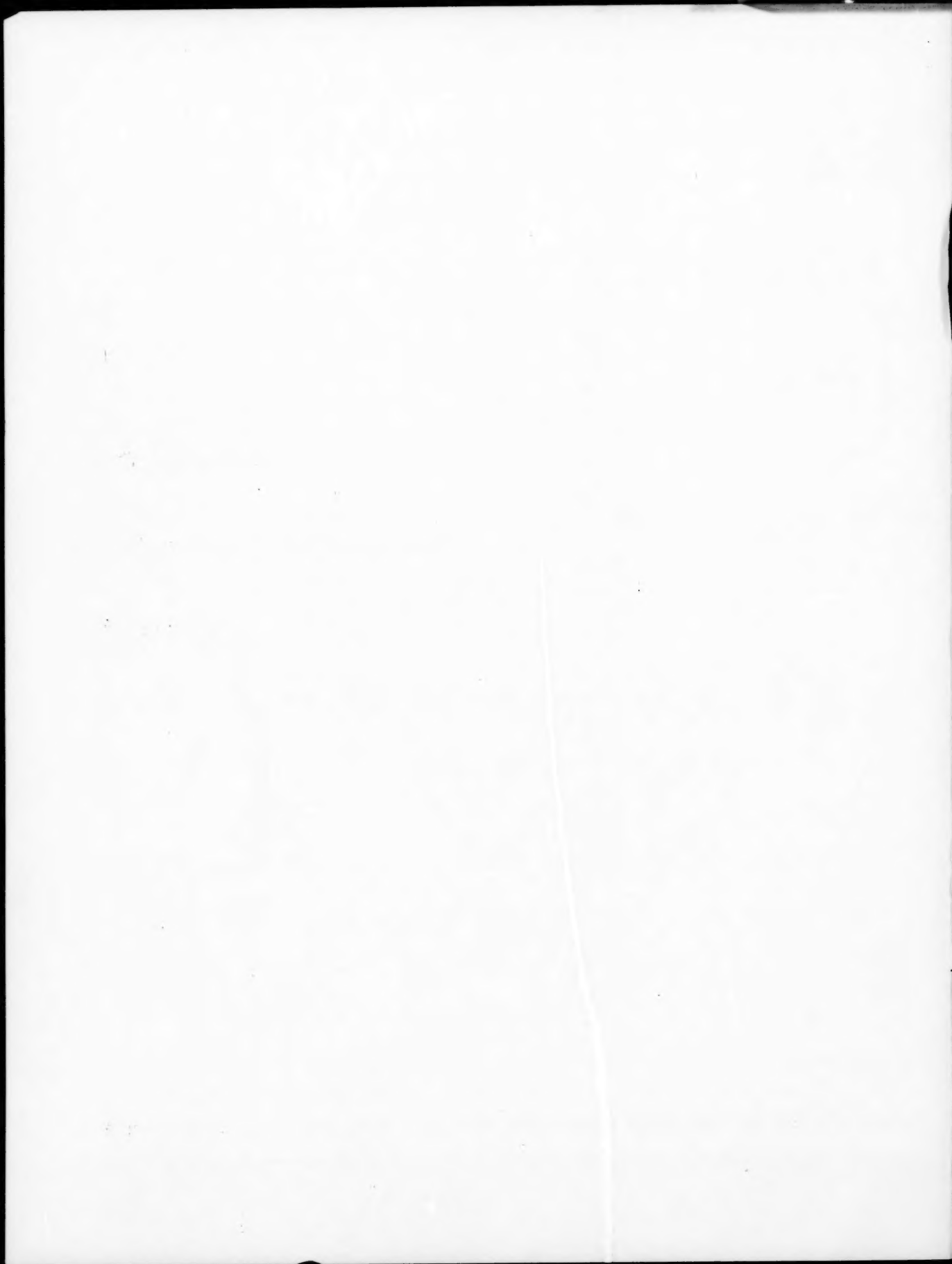
SAE
JOURNAL
INDEX

Volume 64

January to December

1956

SOCIETY OF AUTOMOTIVE ENGINEERS, 485 Lexington Ave., New York 17, N. Y.



Index to SAE Journal

Abbreviations Used:

January, Jan
February, Fe
March, Mr

April, Ap
May, My
June, Je

July, Jl
August, Ag
September, Se

October, Oc
November, No
December, De

Numbers after abbreviation of month refer to page numbers.

Note: Articles here indexed are classified and listed only by the headlines under which they were abridged in SAE Journal.

On pages 22-34 is a listing, alphabetical by authors, of every paper which appeared in SAE Journal in 1956, with the title of the original paper from which the abridgment was made.

A

ACCIDENTS AND ACCIDENT PREVENTION (AIRCRAFT)

- Acute Pilot-Escape Problems, Lt.-Col. John P. Stapp, R. J. Heymans and R. M. Stanley De 44-48
Aircraft Structures Must Fail Safe,
J. F. McBrearty Je 26-29
Fires and Explosions Quenched at Very Start,
George Grabowski Mr. 101
Fuels for Turbine Transports, Hugh Harvey Je 55-59
Hazards of High-Altitude-Speed Flight,
Dr. Ross A. McFarland No 51-52
In Military Flying Today,
Brig.-Gen. Joseph D. Caldara De 51
Pictorial Air Traffic Display, Jacques deVienne No 38-41
Pound-Wise, M. G. Beard and F. W. Kolk De 43

ACCIDENTS AND ACCIDENT PREVENTION (NONAIRCRAFT)

- Aids to Vehicle Design, Dr. Ross A. McFarland Ag 43-45
Current Crash Test Data, R. H. Fredericks Oc 25-27
Highway Safety Work Needs Better Approach,
Ralph J. Crosby Fe 126
The Automotive Safety Engineer and Company, Policies,
Roy Haeusler Se 44-45
The Skill and the Will to Drive Safely,
O. E. Hunt No 64-67
When A Car Crashes, D. M. Severy and
J. H. Mathewson No 47-50

ADAMSON, J. F.

- New American Motors V-8 Jl 38-42
(Co-authors C. E. Burke and D. V. Potter)

ADDITIVES, OIL

- Detergent Oils May Accelerate Engine Wear,
R. J. Pocock Oc 48-51
Host of Additives Developed for Modern Oils,
Ulric B. Bray Mr. 104-106
Multigrade Oil Problems, G. K. Malone, T. W. Selby, F. B. Fischl, H. H. Horowitz, T. S. Tutwiler, R. L. Overcash, W. Hart, and D. J. McClure Se 29-33
Multi-Vis Oils Good But Have Their Lacks,
William A. Howe Oc 112
Oil Performance Facts Newly Evaluated, R. H. Albrecht, R. I. Potter, and Kent Hyatt Se 60-63
Synthetic Lubricants, J. W. Lane and
Leonard Raymond Ap 26

AERODYNAMICS

- High-Speed, High-Altitude Airplanes,
Walter C. Williams Ag 54-57

AINSLEY, W. G.

- The CLR Oil Test Engine Je 46-48
(Co-author A. E. Cleveland)

AIR CARGO

- Flying Aircraft Carriers Will Soon Be Feasible,
Grover Loening Ap 20-23
Tests Throw Light on Dynamic Store Loads,
S. B. Pfeiffer Se 100
USAF's C-130A Hercules Packs 'em in,
Capt. Richard D. Cousins Jan 21-23

AIR CLEANERS

- B & O Tests Air Filters on Diesels,
Pell Kangas Je 132, 134, 136
Dry-Type Air Filter Has Many Applications, Herbert R. Otto, Jr. and John C. Cox Se 98

AIR CONDITIONING

- Cabin Pressure Control System, Everett H. Schroeder Jl 47
Car Air Conditioners Lower RVP Limits,
M. R. Morrow De 111
Dry-Type Air Filter Has Many Applications, Herbert R. Otto, Jr. and John C. Cox Se 98
High Speed Limits Ram Air For Cooling, A. R. Perl and J. Hall Hood De 112, 114

AIRCRAFT ACCESSORIES AND EQUIPMENT

- Aircraft Control Systems, John Markus No 17-19
Air Transports Need Auxiliary Power Unit, J. L. Bartlett and P. C. Scofield Fe 114, 116
Cabin Pressure Control System, Everett H. Schroeder Jl 47
Fires and Explosions Quenched at Very Start,
George Grabowski Mr 101
How B-52 Duct Bellows Failure Was Overcome,
C. R. Peterson Fe 118, 120
Integrated Flight Systems Make Progress,
Ben F. McLeod Ag 106
Let's Integrate Our Aircraft Instruments,
Com. George W. Hoover Jan 72-74
Microjet Pneumatically Controls Jet Engines,
W. E. Reed Fe 21-22
Our "Know" Outstrips Technical "Know-How,"
Helmut Schlitt De 124
Special Joints Aid Aircraft Ducting, K. W. Goebel Ag 85
What Is Best Drive for Accessory Power,
Richard L. McManus Ag 110

AIRCRAFT DESIGN AND PERFORMANCE

- Aircraft Structures Must Fail Safe,
J. F. McBrearty Je 26-29
Aircraft Testing Grows Ever More Complicated,
R. F. Wichser Mr 116, 118
Airlines Need New Short-Haul Aircraft Now,
R. G. Dinning Jan 32-35
Complexity Bugaboo of Military Aircraft,
A. F. Matthews Jl 102-104
Convair Conversion, A. J. Penn Jl 36
Design Simplifies Convair Maintenance, J. J. Alkazin and J. C. Hoover Mr 112, 114
ELECTRA: Turboprop Transport for 1958 Delivery,
Hall L. Hibbard Jan 56-60
Environmental Testing of Missiles and Aircraft, Lt.-Col. F. K. Everest, Jr., Bernard P. Moser, Ray M. Daniel, R. J. Garon, John R. Grimm, Robert R. Beachler, Jr., and F. B. Cole, Jr. Oc 71-75
Flight Line Disruption, P. A. Schweich Se 33-34
Flying Aircraft Carriers Will Soon Be Feasible,
Grover Loening Ap 20-23
Fuselages, K. R. Derryberry Je 69
Glimpses of the DC-8, Gordon Farquhar Ag 49-50
High Altitudes Increase Airplane Stability Problems,
E. R. Heald Ag 25-27
High-Speed Aircraft Brings High Temperature Structural Problems, R. R. Heldenfels Mr 28-34

- High-Speed, High-Altitude Airplanes,
Walter C. Williams Ag 54-57
How B-52 Duct Bellows Failure Was Overcome,
C. R. Peterson Fe 118, 120
Let's Tolerate the Tolerance,
Garmon D. Simmons My 85-89
Needed: A Material Qualification Agency for Certifying
Materials Used in the Aeronautic Industry,
Charles M. Miller Ap 34-35
Pneumatic Ducts Have Designers Up In the Air,
W. M. Cattrell Jan 45-46
The DC-8 Jet Transport, A. E. Raymond Jan 31
USAF's C-130A Hercules Packs 'em in,
Capt. Richard D. Cousins Jan 21-23
Variety of VTOL Aircraft Types Now Feasible, K. S.
Coward, E. R. Hinz, R. J. Woods, and
Charles H. Zimmerman JI 68-74
- AIRCRAFT ENGINES.** See Engines, Aircraft
- AIRCRAFT ICING**
Fuels for Turbine Transports, Hugh Harvey Je 55-59
- AIRCRAFT LANDING GEAR**
Pre-setting and Stress Peening Improve Spring Strength,
E. H. Spaulding Mr 19-21
Production Predictions on Landing Gear,
F. M. Rayburn My 70-71
- AIRCRAFT MAINTENANCE**
Airlines Face Problem of Turbine Overhaul,
Norman R. Parmet Oc 104, 106
Design Simplifies Convair Maintenance, J. J. Alkazin and
J. C. Hoover Mr 112, 114
Jet Engine Servicing Gets More Complicated,
J. B. Hurt Se 37-40
Magnesium Castings Salvaged by Welding,
W. A. Beck Ag 116, 118
Turbojets Promise Reasonable Upkeep, V. L. Schatz, A.
L. Wynn, and R. W. Remke Se 100, 102
X-Ray Saves Money in Airplane Inspection,
Albert D. Edwards Se 108
- AIRCRAFT PROPELLERS**
Allison Power Package for the Lockheed Electra Transport,
R. M. Hazen, Dimitrius Gerdan, and
R. R. Lamotte Je 50-54
"Shush" These Props Are Synchrophased, Charles B. Brahm
and G. E. Sanderson Ap 50-53
Turboprop Controls Must Include Anti-Windmilling De-
vice, Mark E. Kirchner Ap 56-59
- AIRCRAFT, ROTATING WING**
Airlines Need New Short-Haul Aircraft Now,
R. G. Dinning Jan 32-35
Powerplants for Tomorrow's Helicopters, W. S. Miller, Jr.,
R. P. Krebs, and T. C. Blaschke Mr 70-75
Variety of VTOL Aircraft Types Now Feasible, K. S.
Coward, E. R. Hinz, R. J. Woods, and
Charles H. Zimmerman JI 68-74
- AIR POLLUTION**
CRC Group Analyzes Exhaust of Cars Operated on L. A.
Freeway Mr 47-48
- AIRPORTS AND AIRWAYS**
Brightness Contrast Makes Runways Visible, Capt. Nor-
man Lee Barr, Lt. JG. Thomas A. Hussman, Jr., and
Lt. JG. James F. Parker Ag 108, 110
Future of Air Transport, Fred M. Glass Mr 21
The Sky Is The Limit, N. E. Halaby Se 18-24
We Can't Afford NOT to Have Efficient Air Traffic Control,
Stuart G. Tipton Se 22-23
- AIR TRANSPORT**
Airlines Need New Short-Haul Aircraft Now,
R. G. Dinning Jan 32-35
Environmental Testing of Missiles and Aircraft,
Lt.-Col. F. K. Everest, Jr. Oc 71-72
Fuels for Turbine Transports, Hugh Harvey Je 55-59
Future of Air Transport, Fred M. Glass Mr 21
Hazards of High-Altitude-Speed Flight,
Dr. Ross A. McFarland No 51-52
Polar Flight Fine While You Stay Aloft, Knut Jonn De 114
The DC-8 Jet Transport, A. E. Raymond Jan 31
- ALBRECHT, R. H.**
Oil Performance Facts Newly Evaluated Se 60-63
(Co-authors R. I. Potter and Kent Hyatt)
- ALFORD, J. S.**
Compressor Stall Is Well Understood—
But Not Yet Licked Oc 28-36
(Co-authors Maj. Alfred J. Gardner, William A. Benser,
Harold B. Finger, W. A. Gebhardt, R. Bodemuller,
and Maj. Kenneth L. Jones)
- ALKAZIN, J. J.**
Design Simplifies Convair Maintenance Mr 112, 114
(Co-author J. C. Hoover)
- ALLEN, R. C.**
Nuclear Machinery Creates New Engineering
Horizons Ap 60-65
- ALUMINUM AND ALLOYS**
Aluminum Roofs Will Help Car Styling,
David P. Reynolds Fe 108
Aluminum's Future in the Automotive Industry,
Leo F. Swoboda JI 106, 108
High-Speed Aircraft Brings High Temperature Structural
Problems, R. R. Heldenfels Mr 28-34
Impact Extruded Parts Enter Automotive Use,
Norman Olsen Oc 116
Light Metals, M. F. Garwood and F. H. Mason Mr 62
Lincoln's Turbo Drive Transmission,
H. G. English Fe 60-62
Steel Backed Aluminum Bearings, R. S. Frank and
W. J. Lux Je 37-39
- ANDERSON, JONAS**
Stop Piston Burning Oc 60-65
- ANDERSON, J. P.**
North American—Departmental Performance
Rating My 61-62
- APPLE, LT.-COM. ROBERT E.**
Hydrofoil Craft: Boats that Fly on Wet Wings . Ag 46-48
- ATOMIC ENERGY**
Atomic Batteries, Leo Dubinski Ap 44
Atomic Energy Opens New Horizons for Industry—New
Problems Too, A. J. Pomeroy Fe 18-20
Coming! The Gas Turbine Locomotive,
R. Tom Sawyer Oc 98
Nuclear Machinery Creates New Engineering Horizons,
R. C. Allen Ap 60-65
Selected Readings in Atomic Energy Oc 45-46
- AUGUSTINE, CARL A.**
Automation Could Use "Productivity"
Engineers No 104, 106
- AUTOMOBILE ENGINES.** See Engines, Passenger Car
- AUTOMOBILES.** See Passenger Cars
- AVIATION, MILITARY**
Acute Pilot-Escape Problems, Lt.-Col. John P. Stapp, R. J.
Heymans, and R. M. Stanley De 44-48
Aircraft Testing Grows Ever More Complicated,
R. F. Wichser Mr 116, 118
Complexity Bugaboo of Military Aircraft,
A. F. Matthews JI 102-104
Flying Aircraft Carriers Will Soon Be Feasible,
Grover Loening Ap 20-23
In Military Flying Today,
Brig.-Gen. Joseph D. Caldara De 51
Making Aeronautical Standardization Tick,
C. E. Mines Mr 22-25
USAF's C-130A Hercules Packs 'em in,
Capt. Richard D. Cousins Jan 21-23
Variety of Weapons Systems Needed,
Lt.-Gen. J. M. Gavin De 103
Weapon Systems Challenge Industry,
Wallace E. Reese De 104
- AXLES**
Our Best Trucks Have Compatible Power Train Elements,
C. B. Rawson Mr 49-51
Trends in 1957 Car Design, Thomas A. Bissell .. De 17-36

AYRES, VINCENT

Discussion of "New American Motors V-8" by J. F. Adamson, C. E. Burke, and D. V. Potter J1 42

B

BAILEY, J. M.

Seals for Aircraft Gas Turbines Se 46-50
(Co-authors J. B. Stevens, Joseph Palsulich, R. H. Riedel, J. W. Pennington, T. C. Kuchler, E. J. Taschenberg, R. L. Johnson, and M. A. Swikert)

BALDWIN, L. L.

Tubeless Tires Reduce Truck Weight Je 116, 118

BALL, L. M.

Accelerations Costly in Terms of Noise .. No 106, 108, 110

BARNES, GILBERT C.

Turbine Bearings Must Be More Reliable Ap 114, 116, 118
(Co-author Earle A. Ryder)

BARNUM, R. E.

Vapor Lock Tolerance Mr 34
(Co-authors P. J. Clarke and J. P. Hamer)

BARR, CAPT. NORMAN LEE

Brightness Contrast Makes Runways Visible .. Ag 108, 110
(Co-authors Lt. J.G. Thomas A. Hussman, Jr. and Lt. J.G. James F. Parker)

BARTLETT, J. L.

Air Transports Need Auxiliary Power Unit .. Fe 114, 116
(Co-author P. C. Scofield)

BARTON, J. W.

Boeing Airplane Uses Budget Formulas My 60-61

BATTERIES

Atomic Batteries, Leo Dubinski Ap 44

BAUMGARDNER, F. M.

How to Winterize Construction Equipment De 60-67
(Co-authors M. G. Mardoian, T. H. Fones, W. W. Cornman, A. Q. Spitler, P. W. Espenschade, and J. A. Klisch)

BEACHLER, ROBERT R., JR.

Environmental Testing of Missiles and Aircraft . Oc 74-75

BEARD, M. G.

Pound-Wise De 43
(Co-author F. W. Kolk)

BEARDSLEY, G. R.

New Family of V-8 Truck Engines Se 25-28
(Co-author A. A. Catlin)

BEARINGS AND BEARING MATERIALS

How To Choose Anti-friction Bearing Materials, John Preston, Jerome Mogul, and George Floroff Se 56-59
Light Metals, M. F. Garwood and F. H. Mason Mr 62
Molded Nylon Used for Gears and Bearings, John D. Young Fe 108-109
Resins Gain Favor as Bearing Materials, A. J. Cheney, W. B. Happoldt, and K. G. Swayne Se 104, 106
Steel Backed Aluminum Bearings, R. S. Frank and W. J. Lux Je 37-39
Turbine Bearings Must Be More Reliable, Gilbert C. Barnes and Earle A. Ryder Ap 114, 116, 118

BECK, W. A.

Magnesium Castings Salvaged by Welding ... Ag 116, 118

BEIER, K. A.

On-Off Fans Save Horsepower Oc 66-70
(Co-authors H.A. Reynolds, D. F. Lemaux, J. H. Booth, and R. W. Wantin)

BEKKER, M. G.

Low-Flotation Spaced Tracks SE 73

BELITSOS, P. G.

SAE Aeronautic and Ground Vehicle Drafting Groups J1 58-61

BENSER, WILLIAM A.

Compressor Stall Is Well Understood—But Not Yet Licked Oc 28-36
(Co-authors Maj. Alfred J. Gardner, Harold B. Finger, W. A. Gebhardt, R. Bodemuller, Maj. Kenneth L. Jones, and J. S. Alford)

BERGGREN, L. E.

The Small Gas Turbine Oc 41

BERLOT, R. R.

Analyzing Pressure Control Valve on Servo .. De 116, 118

BERTRAND, I. L.

Machining by Tape My 56-57

BEVERLY, EDMOND J.

Car Body Building Jan. 29

BIDWELL, H. H.

Tips on Design for Ease of Maintenance Oc 76-77

BIDWELL, J. B.

General Motors Firebird II Chassis J1 49-52
(Co-author R. E. Owen)

BIEBER, C. G.

Discussion of "Jet Engine Buckets", by Stephen G. Demirjian J1 79

BILLEY, LEINO H.

Efficacy of Muffler Depends on Positioning Mr 102

BISSELL, THOMAS A.

Trends in 1957 Car Design De 17-36

BLAIR, R. W.

The Controlled Gap Seal No 44

BLASCHKE, T. C.

Powerplants for Tomorrow's Helicopters Mr 70-75
(Co-authors W. S. Miller, Jr. and R. P. Krebs)

BOCKEMUEHL, R. R.

2 New Tools Aid Engine Research .. Se 108, 110, 112, 114
(Co-authors E. F. Weller, J. A. Warren, and J. B. Hinkamp)

BODEMULLER, R.

Compressor Stall Is Well Understood—But Not Yet Licked Oc 28-36
Co-authors Maj. Alfred J. Gardner, William A. Benser, Harold B. Finger, W. A. Gebhardt, Maj. Kenneth L. Jones, and J. S. Alford)

BODIES

Car Body Building, Edmond J. Beverly Jan 29
Designing Efficient Automobile Bodies, W. J. Clark, P. O. Johnson, and J. W. Richards Ap 45-49
Primer for Plastics, H. A. Hoppens, C. E. Hoover, R. S. Morrison, W. G. Schultz, J. W. Grief, J. G. Coffin, A. J. Carter, and C. C. Jakust Jan. 36-44
Trends in 1957 Car Design, Thomas A. Bissell .. De 17-36
Truck Body Materials Must Prove Usefulness, Paul R. Hafer No 124, 126
200-HP Gas Turbine Automobile, E. T. Vincent, F. L. Schwartz, Charles Lipson, A. K. Lahti, Charles Harris, and U. O. Lahti Je 18-25

BOHUSLAV, HANS

Monorotor Turbocharger Ap 69-70
(Co-author Carl Jacobson)

BOLAND, R. W.

Clinical Inspection a Boon to Maintenance ... Fe 116, 118
(Co-authors Walter E. Davis, H. A. Grenert, and W. W. Squier)

BOOTH, J. H.

On-Off Fans Save Horsepower Oc 66-70
(Co-authors H. A. Reynolds, D. F. Lemaux, K. A. Beier, and R. W. Wantin)

BORLAND, JOHN

Drive Line Choice Is No Simple Matter Ag 112, 115

- BOYD, A. P.**
Increasing Fuel Sensitivity Challenges Engine Designers Se 54-55
(Co-authors P. C. White and C. J. Domke)
- BRAHM, CHARLES B.**
"Shush" These Props Are Synchrophased Ap 50-53
(Co-author G. E. Sanderson)
- BRAKES**
Fight Against Fade, J. W. Kinchin, T. H. Thomas, D. P. Dyer, C. L. Eksergian, W. B. Love, and D. E. Hobson Je 40-45
Jet Reversers May Double As In-Flight Air Brakes, J. H. Povolny and J. G. McArdle De 84
Trends in 1957 Car Design, Thomas A. Bissell ... De 17-36
Valve Should Protect Against Brake Air Leaks, Homer T. Seale Fe 112
- BRAY, ULRIC B.**
Host of Additives Developed for Modern Oils . Mr 104-106
- BUCEY, BOYD K.**
Extra Fast ... Extra Smooth My 74-78
- BULL, A. W.**
The Truth About Tires Se 41-43
(Co-author W. E. Shively)
- BUNKER, COL. WILLIAM B.**
Personal Flying Machine Is Not Needed by Infantryman No 110, 112
- BURKE, C. E.**
New American Motors V-8 J1 38-42
(Co-authors J. F. Adamson and D. V. Potter)
- BURKHALTER, R. R.**
Lower Silhouette Mr 46
(Co-author P. J. Mazziotti)
- BURROWS, W. F.**
High Speed Light Weight V Diesels by White ... Je 30-34
(Co-author H. W. Hanners)
- BUS ENGINES.** See Engines, Truck and Bus
- BUS MAINTENANCE**
Clinical Inspection a Boon to Maintenance, R. W. Boland, Walter E. Davis, H. A. Grenert, and W. W. Squier Fe 116, 118
Proper Frame of Mind Vital to Field Testing, Hyman Feldman, James P. Moreland, and E. N. Hatch . Oc 118, 120
- C**
- CALDARA, BRIG-GEN. JOSEPH D.**
In Military Flying Today De 51
- CAMPBELL, J. M.**
More Miles Per Gallon through Fuel Research Je 17
- CANDEE, RUSSELL**
The Model 70 Tractor Diesel Engine Jan 47-49
(Co-author B. G. Valentine)
- CAPIAUX, RAYMOND**
Curves Help Select Basic Jet Engine Cycle Ap 122
- CARD, H. E.**
Turbojet Is Known By What It Eats Safely .. Ap 112, 114
(Co-author R. L. Mathias)
- CARTER, A. J.**
Primer for Plastics Jan 36-44
- CASS, ROBERT**
Too Many Guesses in Truck Selection Fe 120, 122
- CASTINGS**
Magnesium Castings Salvaged by Welding, W. A. Beck Ag 116, 118
Processes for Tomorrow, T. R. Linton Je 67-69
Shell-Molded Castings Are Smooth and Accurate, R. G. McCullum Je 116
- CATLIN, A. A.**
New Family of V-8 Truck Engines Se 25-28
(Co-author G. R. Beardsley)
- CATTRELL, W. M.**
Pneumatic Ducts Have Designers Up In the Air Jan 45-46
- CHAO, DR. W. W.**
The Small Gas Turbine Oc 38-39
- CHAMPLIN, E. T.**
Experts Tell Controls for Gear Production ... Je 112, 114
- CHANDLER, J. M.**
Balance of Variables Boosts Mechanical Octanes . Ag 51-53
(Co-author O. Enoch)
- CHASE, J. O.**
Cooperative Studies Are Solving Mysteries of Diesel Ignition Delay De 38-42
(Co-authors T. C. Yu, O. A. Uyehara, P. S. Myers, R. N. Collins, K. Mahadevan, M. M. El Wakil, R. W. Hurn, C. F. Ellis, and K. J. Hughes)
- CHATHAM, RICHARD T., JR.**
Synthetics Launch New Era in Textiles Je 126
- CHATTERTON, ERNEST**
Napier Deltic Diesel Engine De 52-53
- CHENEY, A. J.**
Resins Gain Favor as Bearing Materials Se 104, 106
(Co-authors W. B. Happoldt and K. G. Swayne)
- CHESEBROUGH, HARRY**
Discussion of "Averages Fall Short in Guiding Car Design" by Carl Reynolds Je 112
- CHRISTENSEN, L. M.**
Precision Forgings Reduce Machining-Costs Ag 34-38
- CHRISTENSON, P. A.**
Production Control Aids Reaching of Goals .. Mr 110, 112
- CLARK, W. J.**
Designing Efficient Automobile Bodies Ap 45-49
- CLARKE, P. J.**
Vapor Lock Tolerance Mr 34
(Co-authors R. E. Barnum and J. P. Hamer)
- CLEVELAND, A. E.**
The CLR Oil Test Engine Je 46-48
(Co-author W. G. Ainsley)
- CLUTCHES**
Safety Clutch, Sherman C. Heth Jan 30
- COBB, LELAND D.**
Discussion of "Turbine Bearings Must Be More Reliable" by Gilbert C. Barnes and Earle A. Ryder Ap 118
- COFFEY, BILL L.**
Guided Missile Recovery De 37
- COFFIN, J. G.**
Primer for Plastics Jan 36-44
- COLD WEATHER OPERATION**
How to Winterize Construction Equipment, M. G. Mar- doian, F. M. Baumgardner, T. H. Fones, W. W. Corn- man, A. Q. Spittler, P. W. Espenschade, and J. A. Klisch De 60-67
Polar Flight Fine While You Stay Aloft, Knut Jonn De 114
- COLE, F. B., JR.**
Environmental Testing of Missiles and Aircraft ... Oc 75
- COLLINS, R. N.**
Cooperative Studies Are Solving Mysteries of Diesel Igni- tion Delay De 38-42
(Co-authors T. C. Yu, O. A. Uyehara, P. S. Myers, K. Mahadevan, M. M. El Wakil, R. W. Hurn, J. O. Chase, C. F. Ellis, and K. J. Hughes)
- COLLMAN, J. S.**
General Motors Firebird II's Engine J1 48, 52-54
(Co-author W. A. Turunen)

COMBUSTION

- Cooperative Studies Are Solving Mysteries of Diesel Ignition Delay, T. C. Yu, O. A. Uyehara, P. S. Myers, R. N. Collins, K. Mahadevan, M. M. El Wakil, R. W. Hurn, J. O. Chase, C. F. Ellis, and K. J. Hughes De 38-42
Nitrogen Plays Part in Engine Deposition, R. S. Spindt, Court L. Wolfe, and Donald R. Stevens ... Ap 120, 122
2 New Tools Aid Engine Research, R. R. Bockemuehl, E. F. Weller, J. A. Warren, and
J. B. Hinkamp Se 108, 110, 112, 114

COMBUSTION CHAMBERS

- Balance of Variables Boosts Mechanical Octanes, J. M. Chandler and O. Enoch Ag 51-53
New American Motors V-8, J. F. Adamson, C. E. Burke, and D. V. Potter JI 38-42

COMPRESSORS

- Rotary Design Cuts Air Compressor Weight,
D. O. Meek Ap 106, 108
25,000 Hours of Free Piston Engine Operation,
Gregory Flynn, Jr. Se 64-70

COMPRESSORS, TURBINE ENGINE

- Compressor Stall Is Well Understood—But Not Yet Licked,
Maj. Alfred J. Gardner, William A. Benser, Harold B. Finger W. A. Gebhardt, R. Bodemuller, Maj. Kenneth L. Jones, and J. S. Alford Oc 28-36
Matched Studies Reveal Turboprop Differences,
Elmer H. Davison Ag 85
Precision Machining, T. G. Conway JI 43-47

CONSTRUCTION AND INDUSTRIAL MACHINERY

- Cooling Problems, E. H. Panthofer Ag 65
Designing Earthmovers for Easy Servicing,
F. A. Grooss Oc 108
Drive Line Choice Is No Simple Matter,
John Borland Ag 112, 115
Euclid Twin Tractor Styling, C. M. Jordan Fe 72-73
Euclid's TC-12 Twin Crawler Tractor,
R. C. Williams Fe 71-72
How to Winterize Construction Equipment, M. G. Mardoian, F. M. Baumgardner, T. H. Fones, W. W. Cornman, A. Q. Spitler, P. W. Espenschied, and
J. A. Klisch De 60-67
Loggers Need a More Flexible Transmission,
Gordon A. MacGregor Je 130
Low-Flotation Spaced Tracks, M. G. Bekker Se 73
Low Section Height Oversize Tractor Tires, F. C. Walters and W. H. Worthington JI 75-79
Power Loss Cut by Planet Power Steering, P. J. Sperry and R. J. Erisman No 123
Problems of Using Torque Converters in Excavators, P. J. Swanson and J. H. Meier Se 95-96
Road Rebuilders Ask Equipment Adapted to Needs,
Rufus S. Kirk Oc 102
Rotary Design Cuts Air Compressor Weight,
D. O. Meek Ap 106, 108
Simplify Maintenance Is the Plea of the Army, R. C. Navarin and Karl H. Usow Fe 110-112
Tips on Design for Ease of Maintenance,
H. H. Bidwell Oc 76-78
Tournamatic Transmission, John H. Hyler Ag 27
Tubeless Tire Boon to Earthmovers,
W. P. MacKusick De 107

CONWAY, T.

- Precision Machining Calls for More Skill Mr 99

CONWAY, T. G.

- Precision Machining JI 43-47

COOLING, ENGINE

- Cooling Problems, E. H. Panthofer Ag 65
Keep Them Hot and Out of Drafts, D. R. Ferris, R. A. Weigel, and A. W. Koby No 124
On-Off Fans Save Horsepower, H. A. Reynolds, D. F. Le-maux, K. A. Beier, J. H. Booth, and
R. W. Wantin Oc 66-70
Radiators, H. A. Reynolds Oc 47
Trends in 1957 Car Design, Thomas A. Bissell .. De 17-36

COPP, H. F.

- Continental Mark II Ap 27-33

CORNMAN, W. W.

- How to Winterize Construction Equipment De 60-67
(Co-authors M. G. Mardoian, F. M. Baumgardner,
T. H. Fones, A. Q. Spitler, P. W. Espenschied,
and J. A. Klisch)

COUSINS, CAPT. RICHARD D.

- USAF's C-130A Hercules Packs 'em in Jan 21-23

COWARD, K. S.

- Variety of VTOL Aircraft Types Now Feasible .. JI 68-74
(Co-authors E. R. Hinz, R. J. Woods, and
Charles H. Zimmerman)

COX, JOHN C.

- Dry-Type Air Filter Has Many Applications Se 98
(Co-author Herbert R. Otto, Jr.)

COX, JOHN H.

- Tufted Carpet Boon to Car Makers Je 126

CRAIG, H. E.

- Steel Making Is a Developing Art Oc 114

CRANE, L. S.

- Discussion of "B & O Tests Air Filters on Diesels" by
Pell Kangas Je 134

CRANKCASES

- Precision Machining, T. G. Conway JI 43-47

CRANKSHAFTS

- New American Motors V-8, J. F. Adamson, C. E. Burke,
and D. V. Potter JI 38-42
Precision Machining, T. G. Conway JI 43-47

CRANKSHAW, E. M.

- Discussion of "New American Motors V-8" by J. F. Adamson, C. E. Burke, and D. V. Potter JI 42

CRC

- Are You Satisfied with the Gasoline You're Using, W. P. Dugan, F. T. Finnigan, J. G. Moxey, and
Gilbert Way Se 71-73
CRC Extends ON Scale Above 100 No 42-44
CRC Group Analyzes Exhaust of Cars Operated on L. A. Freeway Mr 47-48
CRC in '56 No 56-63
Locomotives Can Use Lower-Cetane Fuels, R. W. Seniff and F. A. Robbins Ag 60-62
What We Know Today About Diesel Deposits .. Mr 59-61

CRESON, WILLIAM K.

- Power Steering Trends Hint Ultimate Design . Fe 123-124

CROFUT, W.

- Processing Makes the Plastic My 64-69
(Co-author L. B. Keller)

CROSBY, RALPH J.

- Highway Safety Work Needs Better Approach Fe 126

CYLINDERS

- Answers to Today's Piston-Ring Problems,
Melvin E. Estey Mr 39-43
Cylinder Size Limited In Aircooled Diesel,
Richard Kloss No 112, 115

D

DACH, A. A.

- Multigrade Oils Cut Fuel Oil Costs Ap 110, 112

DANIEL, RAY M.

- Environmental Testing of Missiles and Aircraft Oc 73

DARMARA, F. N.

- Discussion of "Jet Engine Buckets" by
Stephen G. Demirjian JI 79

DAVIDSON, T. F.

- Data Show Need for Better Lab Tests Se 102
(Co-author Lt. J. H. Way)

DAVIS, WALTER E.

- Clinical Inspection a Boon to Maintenance .. Fe 116, 118
(Co-authors R. W. Boland, H. A. Grenert,
and W. W. Squier)

- DAVISON, ELMER H.
Matched Studies Reveal Turboprop Differences ... Ag 85
- DAY, W. E.
Shaking Reproduces Propeller Shaft Noise No 63
(Co-author W. P. Michell)
- DeGRAY, DR. R. J.
Chevrolet L-4 Test Due for Modification Se 116, 118
- DELANEY, GEORGE A.
Planning for Progress Mr 17-18
- DeLOREAN, J. Z.
Twin Ultramatic Transmission Fe 57-59
(Co-author C. J. Lucia)
- DEMIRJIAN, STEPHEN G.
Jet Engine Buckets JI 79
- DEPOSITS, ENGINE
CRC in '56 No 56-63
Low Temperature Sludge, D. T. Rogers, W. W. Rice, and
F. L. Jonach Ap 23
Multigrade Oils Help Reduce Deposits, Knock,
John G. Moxey, Jr. Se 96, 98
New Uses for Radioactive Tracers, J. G. Mingle, H. W.
Sigworth, B. A. Fries, C. R. Lewis, A. Hundere, G. C.
Lawrason, and J. P. O'Meara Jan 50-53
Nitrogen Plays Part in Engine Deposition, R. S. Spindt,
Court L. Wolfe, and Donald R. Stevens ... Ap 120, 122
Oil Performance Facts Newly Evaluated, R. H. Albrecht,
R. I. Potter, and Kent Hyatt Se 60-63
Valve Burning, W. D. Sims Ap 53
What We Know Today About Diesel Deposits .. Mr 59-61
- DERRYBERRY, K. R.
Fuselages Je 69
- DETONATION
Balance of Variables Boosts Mechanical Octanes, J. M.
Chandler and O. Enoch Ag 51-53
CRC Extends ON Scale Above 100 No 42-44
Multigrade Oils Help Reduce Deposits, Knock,
John G. Moxey, Jr. Se 96, 98
Nomograph Aids Study of Knock, R. V. Kerley and
K. W. Thurston Ag 20-24
Stop Piston Burning, Jonas Anderson Oc 60-65
- deVIENNE, JACQUES
Pictorial Air Traffic Display No 38-41
- DIESEL ENGINES. See Engines, Diesel
- DILLMAN, O. D.
The How and Why of Chrysler Coaxial Power
Steering No 30-37
- DINNING, R. G.
Airlines Need New Short-Haul Aircraft Now .. Jan 32-35
- DOLAN, J. H.
Tighten P.M. Program To Curb Human Failings . Ap 122
- DOMAN, CARL T.
Sealed Engine Just Around the Corner Se 99
- DOMKE, C. J.
Increasing Fuel Sensitivity Challenges Engine
Designers Se 54-55
(Co-authors A. P. Boyd and P. C. White)
- DRAFTING
SAE Aeronautic and Ground Vehicle Drafting Groups,
P. G. Belitsos JI 58-61
- DRIVES, 4 AND 6 WHEEL
All-Wheel Drives, H. C. McCaslin and
G. W. Scharback Fe 62
- DUBINSKI, LEO
Atomic Batteries Ap 44
- DuBRIDGE, LEE A.
Civilization Can't Be Run By Dopes Jan 17-20
- DUGAN, W. P.
Are You Satisfied with the Gasoline You're Using Se 71-73
(Co-authors F. T. Finnigan, J. G. Moxey,
and Gilbert Way)
- DYER, D. P.
Fight Against Fade Je 40-45
(Co-authors J. W. Kinchin, T. H. Thomas,
C. L. Eksergian, W. B. Love, and D. E. Hobson)
- DYMENT, J. T.
Get "Educated" Before You Specialize Too Much Ag 63-64
- DYNAMOMETERS
Chassis Dynamometer, P. E. Mizelle, J. C. Porter, and
A. R. Rescorla Fe 20
- E
EARTHMOVING MACHINERY. See Construction and
Industrial Machinery
- EASTON, A. H.
Tire Traction Mr 48
- EASTON, E. C.
Specialized or Basic Engineering Education ... Se 99-100
(Co-authors T. L. Preble, Murray Simkins,
M. C. Horine, and R. L. Stanley)
- EDUCATION
Civilization Can't Be Run By Dopes!
Lee A. DuBridge Jan 17-20
Get "Educated" Before You Specialize Too Much Ag 63-64
Specialized or Basic Engineering Education, T. L. Preble,
E. C. Easton, Murray Simkins, M. C. Horine, and
R. L. Stanley Se 99-100
Trained Management, C. G. Kelley Oc 21
Training the College Graduate for Future Leadership in
Industry, L. E. Howell My 22-24
- EDWARDS, ALBERT D.
X-Ray Saves Money in Airplane Inspection Se 108
- EDWARDS, W. P.
Discussion of "Simplify Maintenance Is the Plea of the
Army" by R. C. Navarin and Karl H. Usow Fe 112
- EKSERGIAN, C. L.
Fight Against Fade Je 40-45
(Co-authors J. W. Kinchin, T. H. Thomas, D. P. Dyer,
W. B. Love, and D. E. Hobson)
- ELECTRICAL EQUIPMENT
New Uses for Radioactive Tracers, J. G. Mingle, H. W.
Sigworth, B. A. Fries, C. R. Lewis, A. Hundere, G. C.
Lawrason, and J. P. O'Meara Jan 50-53
Trends in 1957 Car Design, Thomas A Bissell .. De 17-36
- ELECTRONICS
Aircraft Control Systems, John Markus No 17-19
Analyzing Pressure Control Valve on Servo,
R. R. Berlot De 116, 118
Automatic Data Handling Applied to Stereo Camera,
W. C. McFadden De 120, 122
Guided Missile Recovery, Bill L. Coffey De 37
- ELLIS, C. F.
Cooperative Studies Are Solving Mysteries of Diesel Igni-
tion Delay De 38-42
(Co-authors T. C. Yu, O. A. Uyehara, P. S. Myers,
R. N. Collins, K. Mahadevan, M. M. El Wakil,
R. W. Hurn, J. O. Chase, and K. J. Hughes)
- EL WAKIL, M. M.
Cooperative Studies Are Solving Mysteries of Diesel Igni-
tion Delay De 38-42
(Co-authors T. C. Yu, O. A. Uyehara, P. S. Myers,
R. N. Collins, K. Mahadevan, R. W. Hurn,
J. O. Chase, C. F. Ellis, and K. J. Hughes)
- ENGINEERS AND ENGINEERING
Civilization Can't Be Run By Dopes!
Lee A. DuBridge Jan 17-20
Engineering 100 Years from Now, A. A. Kucher . Ag 17-18
Engineers' Income Stays Higher Longer,
Donald S. Hersey No 55

- Get "Educated" Before You Specialize Too Much Ag 63-64
Specialized or Basic Engineering Education, T. L. Preble,
E. C. Easton, Murray Simkins, M. C. Horine, and
R. L. Stanley Se 99-100
The Automotive Safety Engineer and Company Policies,
Roy Haeusler Se 44-45
The Young Graduate Entering Fuel Research,
T. B. Rendel JI 56-57
Tomorrow's Supervisors and Specialists,
Frank Fiore My 46-48
- ENGINES, AIRCRAFT (JET AND TURBINE)**
Airlines Face Problem of Turbine Overhaul,
Norman R. Parmet Oc 104, 106
Allison Power Package for the Lockheed Electra Transport,
R. M. Hazen, Dimitrius Gerdan, and
R. R. LaMotte Je 50-54
Allison T56 Turboprop Features Flexibility, John B. Wheat-
ley, D. G. Zimmerman, and R. W. Hicks Fe 23-26
Combustion Liners, D. P. Huddie Ag 39
Compressor Stall Is Well Understood—But Not Yet Licked,
Maj. Alfred J. Gardner, William A. Benser, Harold B.
Finger, W. A. Gebhardt, R. Bodemuller, Maj. Kenneth
L. Jones, and J. S. Alford Oc 28-36
Control Pressure Loss at Supersonic Speeds,
Rudolph Hermann Oc 95
Convair Conversion, A. J. Penn JI 36
Curves Help Select Basic Jet Engine Cycle,
Raymond Capiaux Ap 122
ELECTRA: Turboprop Transport for 1958 Delivery,
Hall L. Hibbard Jan 56-60
Glimpses of the DC-8, Gordon Farquhar Ap 49-50
How to Take the Roar Out of the Lion—or "Silencing the
Jet Engine Is Now Possible," John Tyler and
George Towle Jan 67-68
Inlet Noise Reflector, J. M. Tyler and
R. Krieghoff De 57-59
Jet Engine Buckets, Stephen G. Demirjian JI 79
Jet Engine Servicing Gets More Complicated,
J. B. Hurt Se 37-40
Jet Engine's Thrust Is Like Gun's Recoil,
Karl H. Larsson No 126
Jet Noise Suppression, M. M. Miller De 59
Jet Reversers May Double As In-Fight Air Brakes, J. H.
Povolny and J. G. McArdle De 84
Matched Studies Reveal Turboprop Differences,
Elmer H. Davison Ag 85
Microjet Pneumatically Controls Jet Engines,
W. E. Reed Fe 21-22
Pound-Wise, M. G. Beard and F. W. Kolk De 43
Powerplants for Tomorrow's Helicopters, W. S. Miller, Jr.,
R. P. Krebs, and T. C. Blaschke Mr 70-75
Seals for Aircraft Gas Turbines, J. B. Stevens, Joseph Pal-
sulich, R. H. Riedel, J. W. Pennington, T. C. Kuchler,
E. J. Taschenberg, R. L. Johnson, M. A. Swikert, and
J. M. Bailey Se 46-50
Still Better Metals Sought for Jet Engines,
Dean K. Hanink Ag 115-116
Turbine Bearings Must Be More Reliable, Gilbert C. Barnes
and Earle A. Ryder Ap 114, 116, 118
Turbojet Is Known By What It Eats Safely, H. E. Card and
R. L. Mathias Ap 112, 114
Turbojets Promise Reasonable Upkeep, V. L. Shatz, A. L.
Wynn, and R. W. Remke Se 100, 102
Turbulent Jet Noise Undergoes Basic Study, Newell D.
Sanders and James C. Laurence JI 104, 106
USAF Gives Turboprops Accelerated Test,
Col. Claude W. Smith Je 128, 130
- ENGINES, AIRCRAFT (RECIPROCATING)**
Stop Piston Burning, Jonas Anderson Oc 60-65
- ENGINES, DIESEL**
B & O Tests Air Filters on Diesels,
Pell Kangas Je 132, 134, 136
Cooperative Studies Are Solving Mysteries of Diesel Igni-
tion Delay, T. C. Yu, O. A. Uyehara, P. S. Myers, R. N.
Collins, K. Mahadevan, M. M. El Wakil, R. W. Hurn, J.
O. Chase, C. F. Ellis, and K. J. Hughes De 38-42
Cylinder Size Limited in Aircooled Diesel,
Richard Kloss No 112, 115
Design Refinements Aid Acceleration Problems of Turbo-
charged High-Speed Diesels, N. M. Reiners and
W. E. Woollenweber Ap 24-26
Diesel Smoking, W. A. Howe Ap 33
High-Speed Light Weight V Diesels by Continental,
E. C. Ginn Je 30-31, 34-36
High Speed Light Weight V Diesels by White, W. F. Bur-
rows and H. W. Hanners Je 30-34
Improved Cold Starting on New Mack Diesel,
W. J. Pelizzoni Se 118
Monorotor Turbocharger, Hans Bohuslav and
Carl Jacobson Ap 69-70
Napier Deltic Diesel Engine, Ernest Chatterton De 52-53
Steel Backed Aluminum Bearings, R. S. Frank and
W. J. Lux Je 37-39
The Model 70 Tractor Diesel Engine, B. G. Valentine and
Russell Candee Jan 47-49
What We Know Today About Diesel Deposits Mr 59-61
- ENGINES, GENERAL**
Wanted: Military Engine With Following Specifications,
R. H. Sawyer Ap 17-19
- ENGINES, JET AND TURBINE (NONAIRCRAFT)**
Coming! The Gas Turbine Locomotive,
R. Tom Sawyer Oc 98
Differential Gas Turbine, David W. Hutchinson Je 70-75
Ford Studies Dynamics of Free Piston Gasifier, Paul
Klotsch and Gordon H. Millar Ag 58-59
General Motors Firebird II's Engine, W. A. Turunen and
J. S. Collman JI 48, 52-54
GMR 4-4 Hyprex Free Piston Turbine Engine,
A. F. Underwood Je 60-66
How "Free" Should a Free-Piston Gasifier Be, Prof. Paul
H. Schweitzer and Arthur F. Underwood Oc 22-24
New Alloys for Automotive Turbines, D. N. Frey JI 33-36
That Turbine Vehicle of the Future, S. D. Heron Ap 36-43
The Small Gas Turbine Oc 37-44
25,000 Hours of Free Piston Engine Operation,
Gregory Flynn, Jr. Se 64-70
200-HP Gas Turbine Automobile, E. T. Vincent, F. L.
Schwartz, Charles Lipson, A. K. Lahti, Charles Harris,
and U. O. Lahti Je 18-25
Wanted: Military Engine With Following Specifications,
R. H. Sawyer Ap 17-19
- ENGINES, MARINE**
They're Taking the Noise Out of Outboard Motors,
James W. Mohr Ag 40-42
- ENGINES, PASSENGER CAR**
Accelerations Costly in Terms of Noise,
L. M. Ball No 106, 108, 110
Chevrolet L-4 Test Due for Modification,
Dr. R. J. DeGray Se 116, 118
Detergent Oils May Accelerate Engine Wear,
R. J. Pocock Oc 48-51
Ford Studies Dynamics of Free Piston Gasifier, Paul
Klotsch and Gordon H. Millar Ag 58-59
Fuel Injection For Gasoline Automobiles, F. C. Mock, W.
C. Suttle, S. E. Miller, and
Alex Hossack Jan 61-66, Fe 27-35
General Motors Firebird II's Engine, W. A. Turunen and
J. S. Collman Jr 48, 52-54
GMR 4-4 Hyprex Free Piston Turbine Engine,
A. F. Underwood Je 60-66
Increasing Fuel Sensitivity Challenges Engine Designers,
A. P. Boyd, P. C. White, and C. J. Domke Se 54-55
Keep Them Hot and Out of Drafts, D. R. Ferris, R. A.
Weigel, and A. W. Koby No 124
New American Motors V-8, J. F. Adamson, C. E. Burke,
and D. V. Potter JI 38-42
Nomograph Aids Study of Knock, R. V. Kerley and
K. W. Thurston Ag 20-24
Predictions on Passenger Car Engines and a New Viscosity
Classification Suggestion for Engine Oils,
William S. James Jan 54-55
Sealed Engine Just Around the Corner,
Carl T. Dorman Se 99
That Turbine Vehicle of the Future, S. D. Heron Ap 36-43
Trends in 1957 Car Design, Thomas A. Bissell De 17-36
200-HP Gas Turbine Automobile, E. T. Vincent, F. L.
Schwartz, Charles Lipson, A. K. Lahti, Charles Harris,
and U. O. Lahti Je 18-25
- ENGINES, TRUCK AND BUS**
Design Refinements Aid Acceleration Problems of Turbo-
charged High-Speed Diesels, N. M. Reiners and
W. E. Woollenweber Ap 24-26
Diesel Smoking, W. A. Howe Ap 33
High Speed Light Weight V Diesels by Continental,
E. C. Ginn Ap 30-31, 34-36

- High Speed Light Weight V Diesels by White, W. F. Burrows and H. W. Hanners Je 30-34
 New Family of V-8 Truck Engines, G. R. Beardsley and A. A. Catlin Se 25-28
 Our Best Trucks Have Compatible Power Train Elements, C. B. Rawson Mr 49-51
 Reo's New Gold Comet V-8, R. M. Tullos and Ray Ranta Ap 19
 Ways to Break In Engines Vary Widely, H. F. Galindo No 102, 104
- ENGLISH, H. G.**
 Lincoln's Turbo Drive Transmission Fe 60-62
- ENOCH, O.**
 Balance of Variables Boosts Mechanical Octanes Ag 51-53
 (Co-author J. M. Chandler)
- EPHRAIM, MAX, JR.**
 Discussion of "B & O Tests Air Filters on Diesels" by Pell Kangas Je 136
- ERISMAN, R. J.**
 Power Loss Cut by Planet Power Steering No 123
 (Co-author P. J. Sperry)
- ESPENSCHADE, P. W.**
 How to Winterize Construction Equipment De 60-67
 (Co-authors M. G. Mardoian, F. M. Baumgardner, T. H. Fones, W. W. Corman, A. Q. Spitler, and J. A. Klisch)
- ESTEY, MELVIN E.**
 Answers to Today's Piston-Ring Problems Mr 39-43
- EVEREST, LT.-COL. F. K., JR.**
 Environmental Testing of Missiles and Aircraft . Oc 71-72
- EXHAUST SYSTEMS AND EXHAUST GASES**
 CRC Group Analyzes Exhaust of Cars Operated on L. A. Freeway Mr 47-48
 CRC in '56 No 56-63
 Design Refinements Aid Acceleration Problems of Turbo-charged High-Speed Diesels, N. M. Reiners and W. E. Woollenweber Ap 24-26
 Diesel Smoking, W. A. Howe Ap 33
 Efficacy of Muffler Depends on Positioning, Leino H. Billey Mr 102
 How to Take the Roar Out of the Lion—or "Silencing the Jet Engine Is Now Possible," John Tyler and George Towle Jan 67-68
 They're Taking the Noise Out of Outboard Motors, James W. Mohr Ag 40-42
 Trends in 1957 Car Design, Thomas A. Bissell . De 17-36
 Truck Silencing Makes Real Progress—But, Lewis C. Kibbee Fe 109-110
- EXTRUSIONS**
 Impact Extruded Parts Enter Automotive Use, Norman Olsen Oc 116
- F**
- FARLING, H. L.**
 Metallurgist's Work Vital in Hot Mill Oc 98
- FARM MACHINERY**
 Farm Tractor Fuels, H. D. Young De 77
 John Deere's 55H Self-Propelled Hillside Combine, D. C. Heitshu Ag 19
 Low-Flotation Spaced Tracks, M. G. Bekker Se 73
 Safety Clutches, Sherman C. Heth Jan 30
 The Model 70 Tractor Diesel Engine, B. G. Valentine and Russell Candee Jan 47-49
 Tobacco Production Needs Mechanization, William E. Splinter, Charles W. Suggs, and Robert W. Wilson Jan 110
- FARQUHAR, GORDON**
 Glimpses of the DC-8 Ag 49-50
- FARR, RICHARD**
 Discussion of "B & O Tests Air Filters on Diesels" by Pell Kangas Je 134
- FEIN, R. S.**
 Only 1363 "Vapor Locks" Found in Survey of 6,000,000 Cars Ap 66-69
 (Co-authors H. I. Wilson, J. R. Muenger, and R. S. Wetmiller)
- FELDMAN, HYMAN**
 Proper Frame of Mind Vital to Field Testing . Oc 118, 120
 (Co-authors James P. Moreland and E. N. Hatch)
- FERRIS, D. R.**
 Keep Them Hot and Out of Drafts No 124
 (Co-authors R. A. Weigel and A. W. Koby)
- FINGER, HAROLD B.**
 Compressor Stall Is Well Understood—But Not Yet Licked Oc 28-36
 (Co-authors Maj. Alfred J. Gardner, William A. Benser, W. A. Gebhardt, R. Bodemuller, Maj. Kenneth L. Jones, and J. S. Alford)
- FINISHES (PROTECTIVE COATINGS)**
 New Materials Cry for Exploitation, Paul E. Lamoureux Oc 116, 118
 Processes for Tomorrow, T. R. Linton Je 67-69
- FINNIGAN, F. T.**
 Are You Satisfied with the Gasoline You're Using Se 71-73
 (Co-authors W. P. Dugan, J. G. Moxey, and Gilbert Way)
- FIORE, FRANK**
 Tomorrow's Supervisors and Specialists My 46-48
- FISCHL, F. B.**
 Multigrade Oil Problems Se 29-33
 (Co-authors G. K. Malone, T. W. Selby, H. H. Horowitz, T. S. Tutwiler, R. L. Overcash, W. Hart, and D. J. McClure)
- FLEET OPERATION**
 Better Mileage, Fewer Failures, E. B. Ogden Mr 18
 Incentive Programs Cut Maintenance Costs, W. W. Vandercook Fe 124, 126
 Multigrade Oils Cut Fuel Oil Costs, A. A. Dach Ap 110, 112
 Proper Frame of Mind Vital to Field Testing, Hyman Feldman, James P. Moreland, and E. N. Hatch . Oc 118, 120
 Recap Your Own Tires, E. B. Ogden Jl 37
 Streamlined Maintenance Cuts Costs, W. A. Taussig Jan 69-71
 Tighten P.M. Program To Curb Human Failings, J. H. Dolan Ap 122
 Trained Analyst Can Up Your Tire Mileage, George M. Sprowls Ap 120
 Tubeless Tires Please Truck Operators, Henry Jennings Ag 66-67
- FLOROFF, GEORGE**
 How to Choose Anti-friction Bearing Materials .. Se 56-59
 (Co-authors John Preston and Jerome Mogul)
- FLYNN, GREGORY, JR.**
 6 Ways to Prevent Indigestion in Residual-Burning Diesels Mr 35-38
 25,000 Hours of Free Piston Engine Operation .. Se 64-70
- FLYNN, H. O.**
 The Powermatic Fe 63-66
- FOLEY, E.**
 Forging Super Alloys Se 35-36
- FONES, T. H.**
 How to Winterize Construction Equipment De 60-67
 (Co-authors M. G. Mardoian, F. M. Baumgardner, W. W. Corman, A. Q. Spitler, P. W. Espenschade, and J. A. Klisch)
- FORD, C. J.**
 Look! No Wheels! The Rolligon Tire Ap 108, 110
 (Co-author L. U. G. Nilsson)
- FOREIGN DESIGN AND OPERATION**
 Europe Pushing Diesel Rail Traction, Richard Herold My 128

- Fight Against Fade, J. W. Kinchin, T. H. Thomas, D. P. Dyer, C. L. Eksergian, W. B. Love, and D. E. Hobson Je 40-45
Napier Deltic Diesel Engine, Ernest Chatterton De 52-53
- FORGINGS**
Forging Super Alloys, E. Foley Se 35-36
Jet Engine Buckets, Stephen G. Demirjian JI 79
Precision Forgings Reduce Machining Costs, L. M. Christensen Ag 34-38
Republic Aviation Plans More and Larger Forgings, C. R. Kramer and Adolph Kastelowitz My 39-41
- FORMING**
Extra Fast ... Extra Smooth, Boyd K. Bucey .. My 74-78
- FORRESTER, P. G.**
Discussion of "Resins Gain Favor as Bearing Materials" by A. J. Cheney, W. B. Happoldt, and K. G. Swayne Se 106
- FRAMES**
Trends in 1957 Car Design, Thomas A. Bissell .. De 17-36
- FRANK, R. S.**
Steel Backed Aluminum Bearings Je 37-39
(Co-author W. J. Lux)
- FREDERICKS, R. H.**
Current Crash Test Data Oc 25-27
- FREMONT, H. A.**
The Small Gas Turbine Oc 39-40
- FREY, D. N.**
New Alloys for Automotive Turbines JI 33-36
- FRIES, B. A.**
New Uses for Radioactive Tracers Jan 50-53
- FUCHS, H. O.**
Discussion of "Leveling Devices Permit Softer Rides" by Maurice Olley Mr 58
- FUELS, AVIATION**
CRC in '56 No 56-63
Fuel for Thought, William M. Holaday Oc 17-20
Fuels for Turbine Transports, Hugh Harvey Je 55-59
- FUELS, DIESEL**
Cooperative Studies Are Solving Mysteries of Diesel Ignition Delay, T. C. Yu, O. A. Uyehara, P. S. Myers, R. N. Collins, K. Mahadevan, M. M. El Wakil, R. W. Hurn, J. O. Chase, C. F. Ellis, and K. J. Hughes De 38-42
CRC in '56 No 56-63
Diesel Smoking, W. A. Howe Ap 33
Farm Tractor Fuels, H. D. Young De 77
Fuel for Thought, William M. Holaday Oc 17-20
Locomotives Can Use Lower-Cetane Fuels, R. W. Seniff and F. A. Robbins Ag 60-62
6 Ways to Prevent Indigestion in Residual-Burning Diesels, Gregory Flynn, Jr. Mr. 35-38
What We Know Today About Diesel Deposits .. Mr 59-61
- FUELS, MOTOR**
Are You Satisfied with the Gasoline You're Using, W. P. Dugan, F. T. Finnigan, J. G. Moxey, and Gilbert Way Se 71-73
Balance of Variables Boosts Mechanical Octanes, J. M. Chandler and O. Enoch Ag 51-53
Chassis Dynamometer, P. E. Mizelle, J. C. Porter, and A. R. Rescorla Fe 20
CRC Extends ON Scale Above 100 No 42-44
CRC in '56 No 56-63
Farm Tractor Fuels, H. D. Young De 77
Fuel for Thought, William M. Holaday Oc 17-20
Increasing Fuel Sensitivity Challenges Engine Designers, A. P. Boyd, P. C. White, and C. J. Domke Se 54-55
Low Temperature Sludge, D. T. Rogers, W. W. Rice, and F. L. Jonach Ap 23
LPG Sales Are Ever-Rising, J. E. Glidewell .. Mr 102, 104
More Miles Per Gallon through Fuel Research Je 17
Nomograph Aids Study of Knock, R. V. Kerley and K. W. Thurston Ag 20-24
The Young Graduate Entering Fuel Research, T. B. Rendel JI 56-57
- Vapor Lock Tolerance, R. E. Barnum, P. J. Clarke, and J. P. Hamer Mr 34
- G**
- GAGE, KENNETH W.**
What's New About the 1956 Hydra-Matic Fe 42-49
(Co-author P. J. Rhoads)
- GALINDO, H. F.**
Ways to Break In Engines Vary Widely No 102, 104
- GARDNER, MAJ. ALFRED J.**
Compressor Stall Is Well Understood—But Not Yet Licked Oc 28-36
(Co-authors William A. Benser, Harold B. Finger, W. A. Gebhardt, R. Bodemuller, Maj. Kenneth L. Jones, and J. S. Alford)
- GARON, R. J.**
Environmental Testing of Missiles and Aircraft ... Oc 73
- GARWOOD, M. F.**
Light Metals Mr 62
(Co-author F. H. Mason)
- GAS TURBINES.** See Engines, Aircraft (Jet and Turbine; Engines, Jet and Turbine)
- GAVIN, LT.-GEN. J. M.**
Variety of Weapons Systems Needed De 103
- GEARS**
Experts Tell Controls for Gear Production, E. T. Champlin Je 112, 114
Molded Nylon Used for Gears and Bearings, John D. Young Fe 108-109
New Transmissions Raise Gear Problems, William C. Mertens and Frank Zuzich Oc 100, 102
- GEBHARDT, W. A.**
Compressor Stall Is Well Understood—But Not Yet Licked Oc 28-36
(Co-authors Maj. Alfred J. Gardner, William A. Benser, Harold B. Finger, R. Bodemuller, Maj. Kenneth L. Jones, and J. S. Alford)
- GEOPHYSICS**
Automatic Data Handling Applied to Stereo Camera, W. C. McFadden De 120, 122
International Geophysical Year, Dr. Joseph Kaplan . De 48
- GERDAN, DIMITRIUS**
Allison Power Package for the Lockheed Electra Transport Je 50-54
(Co-authors R. M. Hazen and R. R. LaMotte)
- GERMERAAD, D. P.**
Discussion of "Turboprop Controls Must Include Anti-Windmilling Device" by Mark E. Kirchner Ap 59
- GILMAN, M. M.**
Plastics in Tooling My 53-55
- GINN, E. C.**
High Speed Light Weight V Diesels by Continental Je 30-31, 34-36
- GLASS, FRED M.**
Future of Air Transport Mr 21
- GLIDEWELL, J. E.**
LPG Sales Are Ever-Rising Mr 102, 104
- GOEBEL, K. W.**
Special Joints Aid Aircraft Ducting Ag 85
- GORSKY, R. J.**
What's New About the 1956 Dynaflo Fe 50-56
- GOUGH, V. E.**
Cornering Can Wear Tires Rapidly Jan 27-29
- GOVERNORS**
Turboprop Controls Must Include Anti-Windmilling Device, Mark E. Kirchner Ap 56-59

- GRABOWSKI, GEORGE**
Fires and Explosions Quenched at Very Start . . . Mr 101
- GRASBY, R. C.**
New Seal Materials . . . Oc 20-21
- GREEN, W. E.**
Design Advances Compel Manufacturing
Research . . . Jl 108, 111
- GREGORY, A. T.**
The Small Gas Turbine . . . Oc 44
- GREIG, J. W.**
Primer for Plastics . . . Jan 36-44
- GRENET, H. A.**
Clinical Inspection a Boon to Maintenance . . Fe 116, 118
(Co-authors R. W. Boland, Walter E.
Davis, and W. W. Squier)
- GRIMES, T. R.**
Newer Plastics Boon to Designers . . . Oc 110, 112
- GRIMM, JOHN R.**
Environmental Testing of Missiles and Aircraft . . Oc 74
- GROSS, F. A.**
Designing Earthmovers for Easy Servicing . . Oc 108
- GROVER, H. J.**
How Shot Peening Improves Fatigue Strength . . Ag 28-30
- GUIDED MISSILES**
Guided Missile Recovery, Bill L. Coffey . . . De 37
Nike Excels As Defense Weapon,
Col. Everett D. Light . . . Ag 110, 112
Processing Makes the Plastic, W. Crofut and
L. B. Keller . . . My 64-69
Weapon Systems Challenge Industry,
Wallace E. Reese . . . De 104
- H**
- HAUSLER, ROY**
The Automotive Safety Engineer and Company
Policies . . . Se 44-45
- HAER, A. A.**
The Small Gas Turbine . . . Oc 37-38
- HAER, PAUL R.**
Truck Body Materials Must Prove Usefulness . No 124, 126
- HALABY, N. E.**
The Sky Is The Limit . . . Se 18-24
- HALL, E. E.**
Discussion of "How To Choose Anti-friction Bearing Materials" by John Preston, Jerome Mogul, and George Floroff . . . Se 59
- HALL, E. J.**
Tool Control . . . De 42
- HAMER, J. P.**
Vapor Lock Tolerance . . . Mr 34
(Co-authors R. E. Barnum and P. J. Clarke)
- HANINK, DEAN K.**
Still Better Metals Sought for Jet Engines . . Ag 115-116
- HANNERS, H. W.**
High Speed Light Weight V Diesels by White . . Je 30-34
(Co-author W. F. Burrows)
- HAPPOLDT, W. B.**
Resins Gain Favor as Bearing Materials . . Se 104, 106
(Co-authors A. J. Cheney and K. G. Swayne)
- HARRIS, B. C.**
Truck Cabs . . . Je 39
- HARRIS, CHARLES**
200-HP Gas Turbine Automobile . . . Je 18-25
(Co-authors E. T. Vincent, F. L. Schwartz, Charles
Lipson, A. K. Lahti, and U. O. Lahti)
- HART, W.**
Multigrade Oil Problems . . . Se 29-33
(Co-authors G. K. Malone, T. W. Selby, F. B. Fischl,
H. H. Horowitz, T. S. Tutwiler, R. L.
Overcash, and D. J. McClure)
- HARTLEY, D. C.**
High-Speed Tire Performance . . . Mr 26-27
(Co-authors T. J. P. Joy and D. M. Turner)
- HARVEY, HUGH**
Fuels for Turbine Transports . . . Je 55-59
- HARWOOD, J. J.**
The Small Gas Turbine . . . Oc 41-43
- HATCH, E. N.**
Proper Frame of Mind Vital to Field Testing . Oc 118, 120
(Co-authors Hyman Feldman and
James P. Moreland)
- HAYS, D. F.**
New Problems Arise in Process Control . . . Je 118, 120
- HAYS, L. C.**
Free-Machining Steels . . . No 45-46
- HAZEN, R. M.**
Allison Power Package for the Lockheed Electra
Transport . . . Je 50-54
(Co-authors Dimitrios Gerdan and R. R. LaMotte)
- HEADLIGHTING**
New 4-Lamp Dual Sealed-Beam Roadlighting System,
Howard Mead and Val J. Roper . . . Oc 52-59
Trends in 1957 Car Design, Thomas A. Bissell . . De 17-36
- HEALD, E. R.**
High Altitudes Increase Airplane Stability
Problems . . . Ag 25-27
- HEAT TREATMENT**
Experts Tell Controls for Gear Production,
E. T. Champlin . . . Je 112, 114
- HEITSHU, D. C.**
John Deere's 55H Self-Propelled Hillside Combine . Ag 19
- HELDENFELS, R. R.**
High-Speed Aircraft Brings High Temperature Structural
Problems . . . Mr 28-34
- HELICOPTERS.** See Aircraft, Rotating Wing
- HENDRICKSON, N. E.**
Discussion of "Leveling Devices Permit Softer Rides" by
Maurice Olley . . . Mr 58
- HERBERG, R. L.**
Good Plant Layout Cuts Production Cost . . . Oc 95-96
- HERMANN, RUDOLPH**
Control Pressure Loss at Supersonic Speeds . . . Oc 95
- HEROLD, RICHARD**
Europe Pushing Diesel Rail Traction . . . My 128
- HERON, S. D.**
Some Elements of Gas Turbine Performance . . Ap 36-43
That Turbine Vehicle of the Future . . . Ap 36-43
- HERSEY, DONALD S.**
Engineers' Income Stays Higher Longer . . . No 55
- HERSHEY, M. P.**
High Speed Tire Meets Growing Need . . . Se 114, 116
- HETH, SHERMAN C.**
Safety Clutches . . . Jan 30
- HEYMANS, R. J.**
Acute Pilot-Escape Problems . . . De 44-48
(Co-authors Lt.-Col. John P. Stapp and R. M. Stanley)
- HIBBARD, HALL L.**
ELECTRA: Turboprop Transport for 1958
Delivery . . . Jan 56-60

- HICKS, R. W.**
Allison T56 Turboprop Features Flexibility . . . Fe 23-26
(Co-authors John B. Wheatley and D. G. Zimmerman)
- HIERSCH, F. A.**
Discussion of "On-Off Fans Save Horsepower" by H. A. Reynolds, D. F. Lemaux, K. A. Beier, J. H. Booth, and R. W. Wantin . . . Oc 66-70
- HILL, H. C.**
The Small Gas Turbine . . . Oc 40
- HINKAMP, J. B.**
2 New Tools Aid Engine Research . . . Se 108, 110, 112, 114
(Co-authors R. R. Bockemuehl, E. F. Weller, and J. A. Warren)
- HINZ, E. R.**
Variety of VTOL Aircraft Types Now Feasible . . . Jl 68-74
(Co-authors K. S. Coward, R. J. Woods, and Charles H. Zimmerman)
- HOBSON, D. E.**
Fight Against Fade . . . Je 40-45
(Co-authors J. W. Kirchin, T. H. Thomas, D. P. Dyer, C. L. Eksergian, and W. B. Love)
- HOLADAY, WILLIAM M.**
Fuel for Thought . . . Oc 17-20
- HOOD, J. HALL**
High Speed Limits Ram Air for Cooling . . . De 112, 114
(Co-author A. R. Perl)
- HOOVER, C. E.**
Primer for Plastics . . . Jan 36-44
- HOOVER, COM. GEORGE W.**
Let's Integrate Our Aircraft Instruments . . . Jan 72-74
- HOOVER, J. C.**
Design Simplifies Convair Maintenance . . . Mr 112, 114
(Co-author J. J. Alkazin)
- HOPPENS, H. A.**
Primer for Plastics . . . Jan 36-44
- HORINE, M. C.**
Specialized or Basic Engineering Education . . . Se 99-100
(Co-authors T. L. Preble, E. C. Easton, Murray Simkins, and R. L. Stanley)
- HOROWITZ, H. H.**
Multigrade Oil Problems . . . Se 29-33
(Co-authors G. K. Malone, T. W. Selby, F. B. Fischl, T. S. Tutwiler, R. L. Overcash, W. Hart, and D. J. McClure)
- HOSSACK, ALEX**
Fuel Injection for Gasoline Automobiles . . . Fe 27-35
- HOWE, W. A.**
Diesel Smoking . . . Ap 33
- HOWE, WILLIAM A.**
Multi-Vis Oils Good But Have Their Lacks . . . Oc 112
- HOWELL, L. E.**
Training the College Graduate for Future Leadership in Industry . . . My 22-24
- HUDDIE, D. P.**
Combustion Liners . . . Ag 39
- HUGHES, K. J.**
Cooperative Studies Are Solving Mysteries of Diesel Ignition Delay . . . De 38-42
(Co-authors T. C. Yu, O. A. Uyehara, P. S. Myers, R. N. Collins, K. Mahadevan, M. M. El Wakil, R. W. Hurn, J. O. Chase, and C. F. Ellis)
- HUMPHREY, M. E.**
Controlling Manufacturing Costs . . . My 58-63, 69
- HUNDERE, A.**
New Uses for Radioactive Tracers . . . Jan 50-53
- HUNSTAD, N. A.**
Study Possible Test Changes for Automatic Transmission Fluid—Type A . . . No 20-27
(Co-authors T. W. Selby and R. E. Osborne)
- HUNT, O. E.**
The Skill and the Will to Drive Safely . . . No 64-67
- HURN, R. W.**
Cooperative Studies Are Solving Mysteries of Diesel Ignition Delay . . . De 38-42
(Co-authors T. C. Yu, O. A. Uyehara, P. S. Myers, R. N. Collins, K. Mahadevan, M. M. El Wakil, J. O. Chase, C. F. Ellis, and K. J. Hughes)
- HURT, J. B.**
Jet Engine Servicing Gets More Complicated . . . Se 37-40
- HUSSMAN, LT. JG. THOMAS A., JR.**
Brightness Contrast Makes Runways Visible . . . Ag 108, 110
(Co-authors Capt. Norman Lee Barr and Lt. JG. James F. Parker)
- HUTCHINSON, DAVID W.**
Differential Gas Turbine . . . Je 70-75
- HYATT, KENT**
Oil Performance Facts Newly Evaluated . . . Se 60-63
(Co-authors R. H. Albrecht and R. I. Potter)
- HYDRAULIC AND PNEUMATIC EQUIPMENT**
American Automatic Transmissions,
S. E. Swallow . . . Fe 36-41
Analyzing Pressure Control Valve on Servo,
R. R. Berlot . . . De 116, 118
Leveling Devices Permit Softer Rides,
Maurice Olley . . . Mr 54-58
Lincoln's Turbo Drive Transmission,
H. G. English . . . Fe 60-62
Power Steering Trends Hint Ultimate Design,
William K. Creson . . . Fe 123-124
Predictions on Passenger Car Engines and a New Viscosity Classification Suggestion for Engine Oils,
William S. James . . . Jan 54-55
The Allison TC-12 Torqmatic Transmission, R. C. Williams, H. C. Kirtland, and C. M. Jordan . . . Fe 67-70
The How and Why of Chrysler Coaxial Power Steering,
O. D. Dillman . . . No 30-37
The Powermatic, H. O. Flynn . . . Fe 63-66
Twin Ultramatic Transmission, C. J. Lucia, and
J. Z. DeLorean . . . Fe 57-59
Valve Should Protect Against Brake Air Leaks,
Homer T. Seale . . . Fe 112
Vibration Tester Handles Large Units, W. C. Schreyer and
Kenneth B. Yost . . . De 107, 109, 111
What's New About the 1956 Dynaflo,
R. J. Gorsky . . . Fe 50-56
What's New About the 1956 Hydra-Matic, Kenneth W. Gage and P. J. Rhoads . . . Fe 42-49
- HYDROFOILS**
Hydrofoil Craft: Boats That Fly on Wet Wings,
Lt.-Com. Robert E. Apple . . . Ag 46-48
- HYLER, JOHN H.**
Tournamatic Transmission . . . Ag 27
- I**
- INJECTION, FUEL**
Faster Fuel Pump Means Less Vapor Lock,
R. A. Randall . . . De 84, 101
Fuel Injection for Gasoline Automobiles, F. C. Mock, W. C. Suttle, S. E. Miller, and
Alex Hossack . . . Jan 61-66, Fe 27-35
Trends in 1957 Car Design, Thomas A. Bissell . . . De 17-36
- INSTRUMENTS**
Analyzing Pressure Control Valve on Servo,
R. R. Berlot . . . De 116, 118
Clinical Inspection a Boon to Maintenance, R. W. Boland, Walter E. Davis, H. A. Grenert, and
W. W. Squier . . . Fe 116, 118
Computer Gadgetry Helps Solve Special Problems, R. A. Roggenbuck and R. D. Jeska . . . Jan 24-26
How Steel Seams Are Detected and Measured . . . Jl 62-67
Test Car Functions as Stress Detective,
Ludvig Petersen . . . Mr 99, 101

- 2 New Tools Aid Engine Research, R. R. Bockemuehl, E. F. Weller, J. A. Warren, and J. B. Hinkamp Se 108, 110, 112, 114
Valve Burning, W. D. Sims Ap 53
- IRON AND STEEL**
Fatigue Failures, Charles M. Schwartz Je 49
Free-Machining Steels, L. C. Hays No 45-46
How Shot Peening Improves Fatigue Strength, H. J. Grover Ag 28-30
How Steel Seams Are Detected and Measured JI 62-67
How To Choose Anti-Friction Bearing Materials, John Preston, Jerome Mogul, and George Floroff Se 56-59
Metallurgist's Work Vital in Hot Mill, H. L. Farling Oc 98
New Alloys for Automotive Turbines, D. N. Frey JI 33-36
Seals for Aircraft Gas Turbines, J. B. Stevens, Joseph Palsulich, R. H. Riedel, J. W. Pennington, T. C. Kuchler, E. J. Taschenberg, R. L. Johnson, M. A. Swikert, and J. M. Bailey Se 46-50
Steel Making Is a Developing Art, H. E. Craig Oc 114
Still Better Metals Sought for Jet Engines, Dean K. Hanink Ag 115-116
- IRWIN, ARTHUR S.**
Discussion of "Turbine Bearings Must Be More Reliable" by Gilbert C. Barnes and Earle A. Ryder Ap 118
- J**
- JACKSON, H. R.**
Discussion of "Detergent Oils May Accelerate Engine Wear" by R. J. Pocock Oc 51
- JACOBSON, CARL**
Monorotor Turbocharger Ap 69-70
(Co-author Hans Bohuslav)
- JAKUST, C. C.**
Primer for Plastics Jan 36-44
- JAMES, W. S.**
Discussion of "Detergent Oils May Accelerate Engine Wear" by R. J. Pocock Oc 51
- JAMES, WILLIAM S.**
Predictions on Passenger Car Engines and a New Viscosity Classification Suggestion for Engine Oils Jan 54-55
- JENNINGS, HENRY**
Tubeless Tires Please Truck Operators Ag 66-67
- JESKA, R. D.**
Computer Gadgetry Helps Solve Special Problems Jan 24-26
(Co-author R. A. Roggenbuck)
- JET PROPULSION.** See Engines, Aircraft (Jet and Turbine)
- JOHNSON, J. F.**
Grooving Aids Friction Materials De 122
(Co-author E. P. Stefl)
- JOHNSON, P. O.**
Designing Efficient Automobile Bodies Ap 45-49
- JOHNSON, R. L.**
Seals for Aircraft Gas Turbines Se 46-50
(Co-authors J.B. Stevens, Joseph Palsulich, R. H. Riedel, J. W. Pennington, T. C. Kuchler, E. J. Taschenberg, M. A. Swikert, and J. M. Bailey)
- JONACH, F. L.**
Low Temperature Sludge Ap 23
(Co-authors D. T. Rogers and W. W. Rice)
- JONES, MAJ. KENNETH L.**
Compressor Stall Is Well Understood—But Not Yet Licked Oc 28-36
(Co-authors Maj. Alfred J. Gardner, William A. Benser, Harold B. Finger, W. A. Gebhardt, R. Bodemuller, and J. S. Alford)
- JONN, KNUT**
Polar Flight Fine While You Stay Aloft De 114
- JORDAN, C. M.**
Euclid Twin Tractor Styling Fe 72-73
The Allison TC-12 Torqmatic Transmission Fe 67-70
(Co-authors R. C. Williams and H. C. Kirtland)
- JOY, T. J. P.**
High-Speed Tire Performance Mr 26-27
(Co-authors D. C. Hartley and D. M. Turner)
- K**
- KAHLES, J. F.**
Discussion of "How To Choose Anti-Friction Bearing Materials" by John Preston, Jerome Mogul, and George Floroff Se 59
- KAMRASS, MURRAY**
Aircraft Noise Can Be Measured Mr 63-69
(Co-author Karl D. Swartzel)
- KANGAS, PELL**
B & O Tests Air Filters on Diesels Je 132, 134, 136
- KAPLAN, DR. JOSEPH**
International Geophysical Year De 48
- KASTELOWITZ, ADOLPH**
Republic Aviation Plans More and Larger Forgings My 39-41
(Co-author C. R. Kramer)
- KELKER, STEPHEN E.**
Huge Capital Outlay Challenge to Planning .. No 115-116
- KELLER, L. B.**
Processing Makes the Plastic My 64-69
(Co-author W. Crofut)
- KELLEY, C. G.**
Trained Management Oc 21
- KELLY, DALE**
Discussion of "Accelerations Costly in Terms of Noise" by L. M. Ball No 110
- KERLEY, R. V.**
Discussion of "Valve Burning" by W. D. Sims .. Ap 53-54
Nomograph Aids Study of Knock Ag 20-24
(Co-author K. W. Thurston)
- KIBBEE, LEWIS C.**
Truck Silencing Makes Real Progress—But .. Fe 109-110
- KINCHIN, J. W.**
Fight Against Fade Je 40-45
(Co-authors T. H. Thomas, D. P. Dyer, C. L. Eksergian, W. B. Love, and D. E. Hobson)
- KINGSTON, L.**
The Small Gas Turbine Oc 40
- KIRCHNER, MARK E.**
Turboprop Controls Must Include Anti-Windmilling Device Ap 56-59
- KIRK, RUFUS S.**
Road Rebuilders Ask Equipment Adapted to Needs Oc 102
- KIRTLAND, H. C.**
The Allison TC-12 Torqmatic Transmission Fe 67-70
(Co-authors R. C. Williams and C. M. Jordan)
- KLISCH, J. A.**
How to Winterize Construction Equipment De 60-67
(Co-authors M. G. Mardoian, F. M. Baumgardner, T. H. Fones, W. W. Cornman, A. Q. Spittler, and P. W. Espenschade)
- KLOSS, RICHARD**
Cylinder Size Limited In Aircooled Diesel .. No 112, 115
- KLOTSCH, PAUL**
Ford Studies Dynamics of Free Piston Gasifier . Ag 58-59
(Co-author Gordon H. Millar)
- KOBY, A. W.**
Keep Them Hot and Out of Drafts No 124
(Co-authors D. R. Ferris and R. A. Weigel)
- KOEN, P. J.**
McKinsey & Co.—The Nonfunctional Approach My 63, 69

- KOENIG, E. F.**
Discussion of "Study Possible Test Changes for Automatic Transmission Fluid—Type A" by N. A. Hunstad, T. W. Selby, and R. E. Osborne No 26-27
- KOLK, F. W.**
Pound-Wise De 43
(Co-author M. G. Beard)
- KOSY, W. R.**
Discussion of "Molded Nylon Used for Gears and Bearings" by John D. Young Fe 109
- KRAMER, C. R.**
Republic Aviation Plans More and Larger Forgings My 39-41
(Co-author Adolph Kastelowitz)
- KREBS, R. P.**
Powerplants for Tomorrow's Helicopters Mr 70-75
(Co-authors W. S. Miller, Jr. and T. C. Blaschke)
- KRIEGHOFF, R.**
Inlet Noise Reflector De 57-59
(Co-author J. M. Tyler)
- KUCHER, A. A.**
Engineering 100 Years from Now Ag 17-18
- KUCHLER, T. C.**
Seals for Aircraft Gas Turbines Se 46-50
(Co-authors J. B. Stevens, Joseph Palsulich, R. H. Reidel, J. W. Pennington, E. J. Taschenberg, R. L. Johnson, M. A. Swikert, and J. M. Bailey)
- L**
- LADEW, CLIFFORD**
New Techniques Advance Welding Art .. Je 122, 124, 126
- LAHTI, A. K.**
200-HP Gas Turbine Automobile Je 18-25
(Co-authors E. T. Vincent, F. L. Schwartz, Charles Lipson, Charles Harris, and U. O. Lahti)
- LAHTI, U. O.**
200-HP Gas Turbine Automobile Je 18-25
(Co-authors E. T. Vincent, F. L. Schwartz, Charles Lipson, A. K. Lahti, and Charles Harris)
- LAMOTTE, R. R.**
Allison Power Package for the Lockheed Electra Transport Je 50-54
(Co-authors R. M. Hazen and Dimitrius Gerdan)
- LAMOREUX, PAUL E.**
New Materials Cry for Exploitation Oc 116, 118
- LANE, J. W.**
Synthetic Lubricants Ap 26
(Co-author Leonard Raymond)
- LARSSON, KARL H.**
Jet Engine's Thrust Is Like Gun's Recoil No 126
- LAURENCE, JAMES C.**
Turbulent Jet Noise Undergoes Basic Study .. JI 104, 106
(Co-author Newell D. Sanders)
- LAWRASON, G. C.**
New Uses for Radioactive Tracers Jan 50-53
- LEMAUX, D. F.**
On-Off Fans Save Horsepower Oc 66-70
(Co-authors H. A. Reynolds, K. A. Beier, J. H. Booth, and R. W. Wantin)
- LEWIS, C. R.**
New Uses for Radioactive Tracers Jan 50-53
- LIGHT, COL. EVERETT D.**
Nike Excels As Defense Weapon Ag 110, 112
- LINTON, T. R.**
Processes for Tomorrow Je 67-69
- LIPSON, CHARLES**
200-HP Gas Turbine Automobile Je 18-25
(Co-authors E. T. Vincent, F. L. Schwartz, A. K. Lahti, Charles Harris, and U. O. Lahti)
- LISHER, L. B.**
Discussion of "Compressor Stall Is Well Understood—But Not Yet Licked" by Maj. Alfred J. Gardner, William A. Benser, Harold B. Finger, W. A. Gebhardt, R. Bode-muller, Maj. Kenneth L. Jones and J. S. Alford .. Oc 36
- LOENING, GROVER**
Flying Aircraft Carriers Will Soon Be Feasible .. Ap 20-23
- LOFTIS, J. D.**
The "Jet Rocket" Railroad Train No 28-29
- LOVE, W. B.**
Fight Against Fade Je 40-45
(Co-authors J. W. Kinchin, T. H. Thomas, D. P. Dyer, C. L. Eksergian, and D. E. Hobson)
- LUBRICANTS AND LUBRICATION (AIRCRAFT)**
CRC in '56 No 56-63
Data Show Need for Better Lab Tests, T. F. Davidson and Lt. J. H. Way Se 102
- LUBRICANTS AND LUBRICATION (NONAIRCRAFT)**
CRC in '56 No 56-63
Detergent Oils May Accelerate Engine Wear, R. J. Pocock Oc 48-51
Host of Additives Developed for Modern Oils, Ulric B. Bray Mr 104-106
Low Temperature Sludge, D. T. Rogers, W. W. Rice, and F. L. Jonach Ap 23
Multigrade Oil Problems, G. K. Malone, T. W. Selby, F. B. Fischl, H. H. Horowitz, T. S. Tutwiler, R. L. Overcash, W. Hart, and D. J. McClure Se 29-33
Multigrade Oils Cut Fuel Oil Costs, A. A. Dach Ap 110, 112
Multigrade Oils Help Reduce Deposits, Knock, John G. Moxey, Jr. Se 96, 98
Multi-Vis Oils Good But Have Their Lacks, William A. Howe Oc 112
New Uses for Radioactive Tracers, J. G. Mingle, H. W. Sigworth, B. A. Fries, C. R. Lewis, A. Hundere, G. C. Lawrason, and J. P. O'Meara Jan 50-53
Oil Performance Facts Newly Evaluated, R. H. Albrecht, R. I. Potter, and Kent Hyatt Se 60-63
Predictions on Passenger Car Engines and a New Viscosity Classification Suggestion for Engine Oils, William S. James Jan 54-55
Study Possible Test Changes for Automatic Transmission Fluid—Type A, N. A. Hunstad, T. W. Selby, and R. E. Osborne No 20-27
Synthetic Lubricants, J. W. Lane and Leonard Raymond Ap 26
The CRL Oil Test Engine, W. G. Ainsley and A. E. Cleveland Je 46-48
Trends in 1957 Car Design, Thomas A. Bissell .. De 17-36
- LUCIA, C. J.**
Twin Ultramatic Transmission Fe 57-59
(Co-author J. Z. DeLorean)
- LUNDQUIST, D.**
Discussion of "Turbine Bearings Must Be More Reliable" by Gilbert C. Barnes and Earle A. Ryder Ap 118
- LUX, W. J.**
Steel Backed Aluminum Bearings Je 37-39
(Co-author R. S. Frank)
- M**
- MacGREGOR, GORDON A.**
Loggers Need a More Flexible Transmission Je 130
- MACHINE TOOLS**
Tooling Today for Tomorrow's Production, F. L. Pryatel My 42-45
- MACHINING**
Extra Fast ... Extra Smooth, Boyd K. Bucey .. My 74-78
Free-Machining Steels, L. C. Hays No 45-46
Machining by Tape, I. L. Bertrand My 56-57
Precision Forgings Reduce Machining Costs, L. M. Christensen Ag 34-38

- Precision Machining, T. G. Conway JI 43-47
Precision Machining Calls for More Skill,
T. Conway Mr 99
- MacKUSICK, W. P.
Tubeless Tire Boon to Earthmovers De 107
- MAGNESIUM AND ALLOYS
Light Metals, M. F. Garwood and F. H. Mason Mr 62
Magnesium Castings Salvaged by Welding,
W. A. Beck Ag 116, 118
- MAHADEVAN, K.
Cooperative Studies Are Solving Mysteries of Diesel Ignition Delay De 38-42
(Co-authors T. C. Yu, O. A. Uyehara, P. S. Myers,
R. N. Collins, M. M. El Wakil, R. W. Hurn,
J. O. Chase, C. F. Ellis, and K. J. Hughes)
- MALONE, G. K.
Multigrade Oil Problems Se 29-33
(Co-authors T. W. Selby, F. B. Fischl, H. H.
Horowitz, T. S. Tutwiler, R. L. Overcash,
W. Hart, and D. J. McClure)
- MANAGEMENT
Civilization Can't Be Run By Dopes!
Lee A. DuBridge Jan. 17-20
Expense Controls, A. E. Stukekey Ag 64-65
Huge Capital Outlay Challenge to Planning,
Stephen E. Kelker No 115-116
Production Control Aids Reaching of Goals
P. A. Christenson Mr 110, 112
Quality Control Needs Management Backing,
J. S. Randall Fe 122-123
Role of Purchasing Often Underestimated,
J. F. Spaulding No 118
3 Case Histories Point Up Communications,
Joseph C. Wellington, Jr. De 54-56
Tomorrow's Supervisors and Specialists,
Frank Fiore My 46-48
Trained Management, C. G. Kelley Oc 21
Training the College Graduate for Future Leadership in
Industry, L. E. Howell My 22-24
- MANLEY, L. W.
Discussion of "Study Possible Test Changes for Automatic
Transmission Fluid—Type A" by N. A. Hunstad, T. T.
Selby, and R. E. Osborne No 24-25
- MANNING, E. W.
Plant PM Raises Quality and Profits No 100, 102
- MARDOIAN, M. G.
How to Winterize Construction Equipment De 60-67
(Co-authors F. M. Baumgardner, T. H. Fones, W. W.
Cornman, A. Q. Spitler, P. W. Espenschade,
and J. A. Klisch)
- MARKUS, JOHN
Aircraft Control Systems No 17-19
- MARTINUZZI, PROF. P. F.
The Small Gas Turbine Oc 43-44
- MASON, F. H.
Light Metals Mr 62
(Co-author M. F. Garwood)
- MATERIALS, NONMETALLIC
Headlinings Can Produce Headaches,
S. L. Terry No 120, 123
New Materials Cry for Exploitation,
Paul E. Lamoureux Oc 116, 118
Synthetics Launch New Era in Textiles,
Richard T. Chatham, Jr. Je 126
Tufted Carpet Boon to Car Makers, John H. Cox .. Je 126
- MATHEWSON, J. H.
When A Car Crashes No 47-50
(Co-author D. M. Severy)
- MATHIAS, R. L.
Turbojet is Known By What It Eats Safely .. Ap 112, 114
(Co-author H. E. Card)
- MATTHAEI, F. C., JR.
Seating for Comfort Becomes a Science De 114, 116
- MATTHEWS, A. F.
Complexity Bugaboo of Military Aircraft JI 102-104
- MAY, T. R.
Lockheed Aircraft Considers Learning Progress . My 62-63
- MAZZIOTTI, P. J.
Lower Silhouette Mr 46
(Co-author R. R. Burkhalter)
- McARDLE, J. G.
Jet Reversers May Double as In-Flight Air Brakes . De 84
(Co-author J. H. Povolny)
- McBREARTY, J. F.
Aircraft Structures Must Fail Safe Je 26-29
- McCASLIN, H. C.
All-Wheel Drives Fe 62
(Co-author G. W. Scharback)
- McCLURE, D. J.
Multigrade Oil Problems Se 29-33
(Co-authors G. K. Malone, T. W. Selby, F. B. Fischl,
H. H. Horowitz, T. S. Tutwiler, R. L.
Overcash, and W. Hart)
- McCONNELL, WILLIAM A.
Problems of Designing High-Speed Test Roads ... Oc 106
- McCULLUM, R. G.
Shell-Molded Castings are Smooth and Accurate .. Je 116
- McFADDEN, W. C.
Automatic Data Handling Applied to Stereo
Camera De 120, 122
- McFARLAND, FOREST
Transmissions—Where They Go from Here Oc 114
- McFARLAND, ROSS A.
Aids to Vehicle Design Ag 43-45
Hazards of High-Altitude-Speed Flight No 51-52
- McLEOD, BEN F.
Integrated Flight Systems Make Progress Ag 106
- McMANUS, RICHARD L.
What Is Best Drive for Accessory Power Ag 110
- McWHORTER, J. F.
Elastomers Enhance Rubber Flooring Mats JI 104
- MEAD, HOWARD
New 4-Lamp Dual Sealed-Beam Roadlighting
System Oc 52-59
(Co-author Val J. Roper)
- MEDROS, RALPH
Plan for Changes—Don't Fight Them Off De 120
- MEEK, D. O.
Rotary Design Cuts Air Compressor Weight .. Ap 106, 108
- MEIER, J. H.
Problems of Using Torque Converters in
Excavators Se 95-96
(Co-author P. J. Swanson)
- MERTENS, WILLIAM C.
New Transmissions Raise Gear Problems Oc 100, 102
(Co-author Frank Zuzich)
- METALS
Forging Super Alloys, E. Foley Se 35-36
Light Metals, M. F. Garwood and F. H. Mason Mr 62
New Alloys for Automotive Turbines, D. N. Frey JI 33-36
Processes for Tomorrow, T. R. Linton Je 67-69
Still Better Metals Sought for Jet Engines,
Dean K. Hanink Ag 115-116

MICHELL, W. P. Shaking Reproduces Propeller Shaft Noise No 63 (Co-author W. E. Day)	MORROW, M. R. Car Air Conditioners Lower RVP Limits De 111
MILITARY Dynamic Threat Creates Defense Race, Major-Gen. Frederic H. Smith, Jr. Se 95 Environmental Testing of Missiles and Aircraft, Lt.-Col. F. K. Everest, Jr., Bernard P. Moser, Ray M. Daniel, R. J. Garon, John R. Grimm, Robert R. Beachler, Jr., and F. B. Cole, Jr. Oc 71-75 Low-Flotation Spaced Tracks, M. G. Bekker Se 73 Nike Excels As Defense Weapon, Col. Everett D. Light Ag 110, 112 Personal Flying Machine Is Not Needed by Infantryman, Col. William B. Bunker No 110, 112 Radar Defenses Pushed Seaward by U. S. Navy, Rear Admiral A. K. Morehouse Ag 106, 108 Simplify Maintenance Is the Plea of the Army, R. C. Na- varin and Karl H. Usow Fe 110-112 Variety of Weapons Systems Needed, Lt.-Gen. J. M. Gavin De 103 Wanted: Military Engine With Following Specifications, R. H. Sawyer Ap 17-19 Weapon Systems Challenge Industry, Wallace E. Reese De 104	MORTENSEN, R. C. Indirect Costs Ag 53 MOSER, BERNARD P. Environmental Testing of Missiles and Aircraft ... Oc 72 MOXEY, J. G. Are You Satisfied with the Gasoline You're Using Se 71-73 (Co-authors W. P. Dugan, F. T. Finnigan, and Gilbert Way) MOXEY, JOHN G., JR. Multigrade Oils Help Reduce Deposits, Knock .. Se 96, 98 MUENGER, J. R. Only 1363 "Vapor Locks" Found in Survey of 6,000,000 Cars Ap 66-69 (Co-authors H. I. Wilson, R. S. Fein, and R. S. Wetmiller) MYERS, P. S. Cooperative Studies Are Solving Mysteries of Diesel Igni- tion Delay De 38-42 (Co-authors T. C. Yu, O. A. Uyehara, R. N. Collins, K. Mahadevan, M. M. El Wakil, R. W. Hurn, J. O. Chase, C. F. Ellis, and K. J. Hughes)
MILLAR, GORDON H. Ford Studies Dynamics of Free Piston Gasifier .. Ag 58-59 (Co-author Paul Klotsch)	N NAVARIN, R. C. Simplify Maintenance Is the Plea of the Army Fe 110-112 (Co-author Karl H. Usow)
MILLER, CHARLES M. Needed: A Material Qualification Agency for Certifying Materials Used in the Aeronautic Industry ... Ap 34-35	NILSSON, L. U. G. Look! No Wheels! The Rolligon Tire Ap 108, 110 (Co-author C. J. Ford)
MILLER, M. M. Jet Noise Suppression De 59	NOISE Accelerations Costly in Terms of Noise, L. M. Ball No 106, 108, 110 Aircraft Noise Can Be Measured, Karl D. Swartzel and Murray Kamrass Mr 63-69 How to Take the Roar Out of the Lion—or "Silencing the Jet Engine Is Now Possible," John Tyler and George Towle Jan 67-68 Inlet Noise Reflector, J. M. Tyler and R. Kreighoff De 57-59 Jet Noise Suppression, M. M. Miller De 59 New Tool, B. A. Rose De 77 Shaking Reproduces Propeller Shaft Noise, W. P. Michell and W. E. Day No 63 "Shush" These Props Are Synchrophased, Charles B. Brahm and G. E. Sanderson Ap 50-53 They're Taking the Noise Out of Outboard Motors, James W. Mohr Ag 40-42 Truck Silencing Makes Real Progress—But, Lewis C. Kibbee Fe 109-110 Turbulent Jet Noise Undergoes Basic Study, Newell D. Sanders and James C. Laurence Jl 104, 106
MILLER, S. E. Fuel Injection for Gasoline Automobiles Jan 61-66, Fe 27-35	O OCHS, R. C. Human Judgment De 42-43
MILLER, W. S., JR. Powerplants for Tomorrow's Helicopters Mr 70-75 (Co-authors R. P. Krebs and T. C. Blaschke)	OGDEN, E. B. Better Mileage, Fewer Failures Mr 18 Discussion of "Truck Silencing Makes Real Progress— But" by Lewis C. Kibbee Fe 110 Discussion of "Valve Should Protect Against Brake Air Leaks" by Homer T. Seale Fe 112, 114 Recap Your Own Tires Jl 37
MINES, C. E. Making Aeronautical Standardization Tick Mr 22-25	OIL FILTERS Detergent Oils May Accelerate Engine Wear, R. J. Pocock Oc 48-51
MINGLE, J. G. New Uses for Radioactive Tracers Jan 50-53	OLLEY, MAURICE Leveling Devices Permit Softer Rides Mr 54-58
MITCHELL, D. C. Discussion of "Resins Gain Favor as Bearing Materials" by A. J. Cheney, W. B. Happoldt, and K. G. Swayne Se 106	OLSEN, NORMAN Impact Extruded Parts Enter Automotive Use ... Oc 116
MIZELLE, P. E. Chassis Dynamometer Fe 20 (Co-authors J. C. Porter and A. R. Rescorla)	O'MEARA, J. P. New Uses for Radioactive Tracers Jan 50-53
MOCK, F. C. Fuel Injection for Gasoline Automobiles Jan 61-66 (Co-author W. C. Suttle)	
MOGUL, JEROME How To Choose Anti-friction Bearing Materials .. Se 56-59 (Co-authors John Preston and George Floroff)	
MOHR, JAMES W. They're Taking the Noise Out of Outboard Motors Ag 40-42	
MOOS, H. R. Discussion of "B & O Tests Air Filters on Diesels" by Pell Kangas Je 136	
MOREHOUSE, REAR ADMIRAL A. K. Radar Defenses Pushed Seaward by U. S. Navy Ag 106, 108	
MORELAND, JAMES P. Proper Frame of Mind Vital to Field Testing Oc 118, 120 (Co-authors Hyman Feldman and E. N. Hatch)	
MORRISON, R. S. Primer for Plastics Jan 36-44	
MORROW, CHARLES T. The Philosophy of Reliability Je 48	

- ORNAS, THEODORE
Styling Trucks Multiplies Problems Je 120, 122
- OSBORNE, R. E.
Study Possible Test Changes for Automatic Transmission Fluid—Type A No 20-27
(Co-authors N. A. Hunstad and T. W. Selby)
- OTTO, HERBERT R., JR.
Dry-Type Air Filter Has Many Applications Se 98
(Co-author John C. Cox)
- OVERCASH, R. L.
Multigrade Oil Problems Se 29-33
(Co-authors G. K. Malone, T. W. Selby, F. B. Fischl, H. H. Horowitz, T. S. Tutwiler, W. Hart, and D. J. McClure)
- OWEN, R. E.
General Motors Firebird II Chassis JI 49-52
(Co-author J. B. Bidwell)
- P**
- PALSULICH, JOSEPH
Seals for Aircraft Gas Turbines Se 46-50
(Co-authors J. B. Stevens, R. H. Riedel, J. W. Pennington, T. C. Kuchler, E. J. Taschenberg, R. L. Johnson, M. A. Swigert, and J. M. Bailey)
- PANTHOFFER, E. H.
Cooling Problems Ag 65
- PARKER, LT. JG. JAMES F.
Brightness Contrast Makes Runways Visible .. Ag 108, 110
(Co-authors Capt. Norman Lee Barr and Lt. JG. Thomas A. Hussman, Jr.)
- PARMET, NORMAN R.
Airlines Face Problem of Turbine Overhaul .. Oc 104, 106
- PASSENGER CAR DESIGN AND PERFORMANCE
Aids to Vehicle Design, Ross A. McFarland Ag 43-45
Aluminum Roofs Will Help Car Styling, David P. Reynolds Fe 108
Averages Fall Short in Guiding Car Design, Carl Reynolds Je 112
Car Control and Stability Characteristics, Leonard Segel De 68-72
Computer Gadgets Help Solve Special Problems, R. A. Roggenbuck and R. D. Jeska Jan 24-26
Continental Mark II, H. F. Copp Ap 27-33
General Motors Firebird II Chassis, J. B. Bidwell and R. E. Owen JI 49-52
Headlinings Can Produce Headaches, S. L. Terry No 120, 123
Lower Silhouette, R. R. Burkhalter and P. J. Mazzotti Mr 46
Minimum Height Requirements, William M. Schmidt Oc 79-80
Synthetics Launch New Era in Textiles, Richard T. Chatham, Jr. Je 126
Too Big, Too Gaudy, Too Expensive to Run, R. J. S. Pigott Je 130
Trends in 1957 Car Design, Thomas A. Bissell .. De 17-36
200-HP Gas Turbine Automobile, E. T. Vincent, F. L. Schwartz, Charles Lipson, A. K. Lahti, Charles Harris, and U. O. Lahti Je 18-25
Weight at Birth Key to Car Design, A. G. Spear .. De 103
- PASSENGER CAR ENGINES. See Engines, Passenger Car
- PASSENGER-CAR MAINTENANCE
Undercarriage Sealer A "Must" for Protection, G. A. Pethick Mr 118
- PELIZZONI, W. J.
Improved Cold Starting on New Mack Diesel Se 118
- PENN, A. J.
Convair Conversion JI 36
- PENNINGTON, J. W.
Seals for Aircraft Gas Turbines Se 46-50
(Co-authors J. B. Stevens, Joseph Palsulich, R. H. Riedel, T. C. Kuchler, E. J. Taschenberg, R. L. Johnson, M. A. Swikert, and J. M. Bailey)
- PERL, A. R.
High Speed Limits Ram Air for Cooling De 112, 114
(Co-author J. Hall Hood)
- PETERSEN, LUDVIG
Test Car Functions as Stress Detective Mr 99, 101
- PETERSON, C. R.
How B-25 Duct Bellows Failure Was Overcome Fe 118, 120
- PETERSON, L. H.
P-I-E's Prototype Dromedary Ag 31-33
- PETHICK, G. A.
Undercarriage Sealer A "Must" for Protection ... Mr 118
- PFEIFFER, S. B.
Tests Throw Light on Dynamic Store Loads Se 100
- PIGOTT, R. J. S.
Too Big, Too Gaudy, Too Expensive to Run Je 130
- PIPER, T. E.
Discussion of "Needed: A Material Qualification Agency for Certifying Materials Used in the Aeronautic Industry" by Charles M. Miller Ap 35
- PISTONS AND RINGS
Answers to Today's Piston-Ring Problems, Melvin E. Estey Mr 39-43
New American Motors V-8, J. F. Adamson, C. E. Burke, and D. V. Potter JI 38-42
New Uses for Piston Rings, F. A. Robbins Se 51-53
Stop Piston Burning, Jonas Anderson Oc 60-65
- PLASTICS
Elastomers Are Improving, W. J. Simpson Mr 44-46
Molded Nylon Used for Gears and Bearings, John D. Young Fe 108-109
New Materials Cry for Exploitation, Paul E. Lamoureux Oc 116, 118
New Seal Materials, R. C. Grasby Oc 20-21
Newer Plastics Boon to Designers, T. R. Grimes Oc 110, 112
Plastics in Tooling, M. M. Gilman My 53-55
Primer for Plastics, H. A. Hoppens, C. E. Hoover, R. S. Morrison, W. G. Schultz, J. W. Greig, J. G. Coffin, A. J. Carter, and C. C. Jakust Jan 36-44
Processing Makes the Plastic, W. Crofut and L. B. Keller My 64-69
Resins Gain Favor as Bearing Materials, A. J. Cheney, W. B. Happoldt, and K. G. Swayne Se 104, 106
Truck Body Materials Must Prove Usefulness, Paul R. Hafer No 124, 126
- POCOCK, R. J.
Detergent Oils May Accelerate Engine Wear ... Oc 48-51
- POLLOW, S. D.
Favors Reed Valve for Two-Cycle Engines .. Mr 108, 110
- POMEROY, A. J.
Atomic Energy Opens New Horizons for Industry—New Problems Too! Fe 18-20
- PORTER, J. C.
Chassis Dynamometer Fe 20
(Co-authors P. E. Mizelle and A. R. Rescorla)
- POTTER, D. V.
New American Motors V-8 JI 38-42
(Co-authors J. F. Adamson and C. E. Burke)
- POTTER, R. I.
Discussion of "Car Air Conditioners Lower RVP Limits" by M. R. Morrow De 111
Discussion of "Study Possible Test Changes for Automatic Transmission Fluid—Type A" by N. A. Hunstad, T. W. Selby, and R. E. Osborne No 25-26
Oil Performance Facts Newly Evaluated Se 60-63
(Co-authors R. H. Albrecht and Kent Hyatt)
- POVOLNY, J. H.
Jet Reversers May Double As In-Flight Air Brakes . De 84
(Co-author J. G. McArdle)

- PREBLE, T. L.**
Specialized or Basic Engineering Education ... Se 99-100
(Co-authors E. C. Easton, Murray Simkins,
M. C. Horine, and R. L. Stanley)
- PREIGNITION**
Stop Piston Burning, Jonas Anderson Oc 60-65
- PRESTON, JOHN**
How To Choose Anti-friction Bearing Materials . Se 56-59
(Co-authors Jerome Mogul and George Floroff)
- PRODUCTION (AIRCRAFT)**
Aircraft Control Systems, John Markus No 17-19
Air Force Heavy Press Program Takes 2 Giant
Steps My 18-21
Automation Could Use "Productivity" Engineers,
Carl A. Augustine No 104, 106
Boeing Airplane Uses Budget Formulas,
J. W. Barton My 60-61
Controlling Manufacturing Costs,
M. E. Humphrey My 58-63, 69
Design Advances Compel Manufacturing Research,
W. E. Green J1 108, 111
Douglas Aircraft Uses Scatter Diagrams,
N. H. Shappell My 58-60
Expense Controls, A. E. Stukey Ag 64-65
Extra Fast ... Extra Smooth, Boyd K. Bucey . My 74-78
Flight Line Disruption, P. A. Schweich Se 33-34
Fuselages, K. R. Derryberry Je 69
Good Plant Layout Cuts Production Cost,
R. L. Herberg Oc 95-96
Let's Tolerate the Tolerance, Garmon D. Simmons My 85-89
Light Metals, M. F. Garwood and F. H. Mason Mr 62
Lockheed Aircraft Considers Learning Progress,
T. R. May My 62-63
Machining by Tape, I. L. Bertrand My 56-57
McKinsey & Co.—The Nonfunctional Approach,
P. J. Koen My 63, 69
New Problems Arise in Process Control,
D. F. Hays Je 118, 120
North American—Departmental Performance Rating,
J. P. Anderson My 61-62
Plan for Changes—Don't Fight Them Off,
Ralph Medros De 120
Plant PM Raises Quality and Profits,
E. W. Manning No 100, 102
Plastics in Tooling, M. M. Gilman My 53-55
Precision Forgings Reduce Machining Costs,
L. M. Christensen Ag 34-38
Precision Machining, T. G. Conway J1 43-47
Processing Makes the Plastic, W. Crofut and
L. B. Keller My 64-69
Production Needs, C. O. Stump De 49-51
Production Predictions on Landing Gear,
F. M. Rayburn My 70-71
Republic Aviation Plans More and Larger Forgings, C. R.
Kramer and Adolph Kastelowitz My 39-41
Role of Purchasing Often Underestimated,
J. F. Spaulding No 118
The Philosophy of Reliability, Charles T. Morrow . Je 48
Tool Control, E. J. Hall De 42
Vibration Tester Handles Large Units, W. C. Schreyer and
Kenneth B. Yost De 107, 109, 111
- PRODUCTION EQUIPMENT**
Air Force Heavy Press Program Takes 2 Giant
Steps My 18-21
Machining by Tape, I. L. Bertrand My 56-57
Plastics in Tooling, M. M. Gilman My 53-55
Production Needs, C. O. Stump De 49-51
- PRODUCTION (NONAIRCRAFT)**
Expense Controls, A. E. Stukey Ag 64-65
Experts Tell Controls for Gear Production,
E. T. Champlin Je 112, 114
Human Judgment, R. C. Ochs De 42-43
Indirect Costs, R. C. Mortensen Ag 53
Production Control Aids Reaching of Goals,
P. A. Christenson Mr 110, 112
Quality Control Needs Management Backing,
J. S. Randall Fe 122-123
Role of Purchasing Often Underestimated,
J. F. Spaulding No 118
Shell Molding, L. E. Wile No 53-55
The How and Why of Chrysler Coaxial Power Steering,
O. D. Dillman No 30-37
- 3 Case Histories Point Up Communications,
Joseph C. Wellington, Jr. De 54-56
Tooling Today for Tomorrow's Production,
F. J. Pryatel My 42-45
What's New About the 1956 Dynaflo,
R. J. Gorsky Fe 50-56
- PROPELLER SHAFTS**
Our Best Trucks Have Compatible Power Train Elements
C. B. Rawson Mr 49-51
Shaking Reproduces Propeller Shaft Noise, W. P. Michell
and W. E. Day No 63
Trends in 1957 Car Design, Thomas A. Bissell .. De 17-36
- PRYATEL, F. J.**
Tooling Today for Tomorrow's Production My 42-45
- PUMPS**
Faster Fuel Pump Means Less Vapor Lock,
R. A. Randall De 84, 101
Fuel Injection for Gasoline Automobiles, F. C. Mock, W. C.
Suttle, S. E. Miller, and
Alex Hossack Jan 61-66, Fe 27-35
- R**
- RACING**
Stock Car Racing Tells How Good We Aren't,
Mauri Rose De 101, 103
- RADAR**
Nike Excels As Defense Weapon,
Col. Everett D. Light Ag, 110, 112
Pictorial Air Traffic Display,
Jacques deVienne No 38-41
Processing Makes the Plastic, W. Crofut and
L. B. Keller My 64-69
Radar Defenses Pushed Seaward by U.S. Navy,
Rear Admiral A. K. Morehouse Ag 106, 108
- RADIOACTIVITY**
Atomic Energy Opens New Horizons for Industry—New
Problems Too, A. J. Pomeroy Fe 18-20
New Uses for Radioactive Tracers, J. G. Mingle, H. W.
Sigworth, B. A. Fries, C. R. Lewis, A. Hundere, G. C.
Lawrason, and J. P. O'Meara Jan 50-53
- RAILROADS**
B & O Tests Air Filters on Diesels,
Pell Kangas Je 132, 134, 136
Coming! The Gas Turbine Locomotive,
R. Tom Sawyer Oc 98
Europe Pushing Diesel Rail Traction,
Richard Herold My 128
Locomotives Can Use Lower-Cetane Fuels, R. W. Seniff
and F. A. Robbins Ag 60-62
6 Ways to Prevent Indigestion in Residual-Burning Diesels,
Gregory Flynn, Jr. Mr 35-38
Test Car Functions as Stress Detective,
Ludvig Petersen Mr 99,101
The "Jet Rocket" Railroad Train, J. D. Loftis .. No 28-29
- RANDALL, J. S.**
Quality Control Needs Management Backing . Fe 122-123
- RANDALL, R. A.**
Faster Fuel Pump Means Less Vapor Lock ... De 84, 101
- RANTA, RAY**
Reo's New Gold Comet V-8 Ap 19
(Co-author R. M. Tullos)
- RAWSON, C. B.**
Our Best Trucks Have Compatible Power Train
Elements Mr 49-51
- RAYBURN, F. M.**
Production Predictions on Landing Gear My 70-71
- RAYMOND, A. E.**
The DC-8 Jet Transport Jan 31
- RAYMOND, LEONARD**
Synthetic Lubricants Ap 26
(Co-author J. W. Lane)
- REED, W. E.**
Microjet Pneumatically Controls Jet Engines ... Fe 21-22
- REESE, WALLACE E.**
Weapon Systems Challenge Industry De 104

- REINERS, N. M.**
Design Refinements Aid Acceleration Problems of Turbocharged High-Speed Diesels Ap 24-26
(Co-author W. E. Woollenweber)
- REMKE, R. W.**
Turbojets Promise Reasonable Upkeep Se 100, 102
(Co-authors V. L. Schatz and A. L. Wynn)
- REMONDINO, M. A.**
Discussion of "Valve Burning" by W. D. Sims .. Ap 53-54
- RENDEL, T. B.**
The Young Graduate Entering Fuel Research JI 56-57
- RESCORLA, A. R.**
Chassis Dynamometer Fe 20
(Co-authors P. E. Mizelle and J. C. Porter)
- REYNOLDS, CARL**
Averages Fall Short in Guiding Car Design Je 112
- REYNOLDS, DAVID P.**
Aluminum Roofs Will Help Car Styling Fe 108
- REYNOLDS, H. A.**
On-Off Fans Save Horsepower Oc 66-70
(Co-authors D. F. Lemaux, K. A. Beier, J. H. Booth, and R. W. Wantin)
Radiators Oc 47
- RHOADS, P. J.**
What's New About the 1956 Hydra-Matic Fe 42-49
(Co-author Kenneth W. Gage)
- RICE, W. W.**
Low Temperature Sludge Ap 23
(Co-authors D. T. Rogers and F. L. Jonach)
- RICHARDS, J. W.**
Designing Efficient Automobile Bodies Ap 45-49
- RIDING QUALITY**
Leveling Devices Permit Softer Rides,
Maurice Olley Mr 54-58
Minimum Height Requirements,
William M. Schmidt Oc 79-80
Seating for Comfort Becomes a Science,
F. C. Matthaai, Jr. De 114, 116
- RIEDEL, R. H.**
Seals for Aircraft Gas Turbines Se 46-50
(Co-authors J. B. Stevens, Joseph Palsulich, J. W. Pennington, T. C. Kuchler, E. J. Taschenberg, R. L. Johnson, M. A. Swigert, and J. M. Bailey)
- ROADS AND STREETS**
Problems of Designing High-Speed Test Roads,
William A. McConnell Oc 106
Road Rebuilders Ask Equipment Adapted to Needs,
Rufus S. Kirk Oc 102
- ROBBINS, F. A.**
Locomotives Can Use Lower-Cetane Fuels Ag 60-62
(Co-author R. W. Seniff)
New Uses for Piston Rings Se 51-53
- ROENSCH, M. M.**
Discussion of "Detergent Oils May Accelerate Engine Wear" by R. J. Pocock Oc 50-51
- ROGERS, D. T.**
Low Temperature Sludge Ap 23
(Co-authors W. W. Rice and F. L. Jonach)
- ROGGENBUCK, R. A.**
Computer Gadgetry Helps Solve Special Problems Jan 24-26
(Co-author R. D. Jeska)
- ROPER, VAL J.**
New 4-Lamp Dual Sealed-Beam Roadlighting System Oc 52-59
(Co-author Howard Mead)
- ROSE, B. A.**
New Tool De 77
- ROSE, MAURI**
Stock Car Racing Tells How Good We Aren't...De 101, 103
- ROWELL, WILLIAM G.**
Discussion of "Aircraft Structures Must Fail Safe" by J. F. McBrearty Je 29
- RUBBER AND ELASTOMERS**
Elastomers Are Improving, W. J. Simpson Mr 44-46
Elastomers Enhance Rubber Flooring Mats,
J. F. McWhorter JI 104
Let's Test Rubber Dynamically, R. P. Schmuckal .. Ap 55
New Seal Materials, R. C. Grasby Oc 20-21
- RULEY, BRYCE T.**
Discussion of "Turbine Bearings Must Be More Reliable" by Gilbert C. Barnes and Earle A. Ryder Ap 118
- RYDER, EARLE A.**
Turbine Bearings Must Be More Reliable Ap 114, 116, 118
(Co-author Gilbert C. Barnes)
- S**
- SAE**
Making Aeronautical Standardization Tick,
C. E. Mines Mr 22-25
New 4-Lamp Dual Sealed-Beam Roadlighting System,
Howard Mead and Val J. Roper Oc 52-59
Planning for Progress, George A. Delaney Mr 17-18
SAE Aeronautic and Ground Vehicle Drafting Groups,
P. G. Belitsos JI 58-61
- SANDERS, NEWELL D.**
Turbulent Jet Noise Undergoes Basic Study .. JI 104, 106
(Co-author James C. Laurence)
- SANDERSON, G. E.**
"Shush" These Props Are Synchrophased Ap 50-53
(Co-author Charles B. Brahm)
- SAWYER, R. H.**
Wanted: Military Engine With Following Specifications Ap 17-19
- SAWYER, R. TOM**
Coming! The Gas Turbine Locomotive Oc 98
- SCHARBACK, G. W.**
All-Wheel Drives Fe 62
(Co-author H. C. McCaslin)
- SCHATZ, V. L.**
Turbojets Promise Reasonable Upkeep Se 100, 102
(Co-authors A. L. Wynn and R. W. Remke)
- SCHLITT, HELMUT**
Our "Know" Outstrips Technical "Know How" ... De 124
- SCHMIDT, WILLIAM M.**
Minimum Height Requirements Oc 79-80
- SCHMUCKAL, R. P.**
Let's Test Rubber Dynamically Ap 55
- SCHREYER, W. C.**
Vibration Tester Handles Large Units .. De 107, 109, 111
(Co-author Kenneth B. Yost)
- SCHROEDER, EVERETT H.**
Cabin Pressure Control System JI 47
- SCHULTZ, W. G.**
Primer for Plastics Jan 36-44
- SCHWARTZ, CHARLES M.**
Fatigue Failures Je 49
- SCHWARTZ, F. L.**
200-HP Gas Turbine Automobile Je 18-25
(Co-authors E. T. Vincent, Charles Lipson, A. K. Lahti, Charles Harris, and U. O. Lahti)

- SCHWEICH, P. A.
Flight Line Disruption Se 33-34
- SCHWEITZER, PAUL H.
How "Free" Should a Free-Piston Gasifier Be .. Oc 22, 24
- SCOFIELD, P. C.
Air Transports Need Auxiliary Power Unit .. Fe 114, 116
(Co-author J. L. Bartlett)
- SEALE, HOMER T.
Valve Should Protect Against Brake Air Leaks ... Fe 112
- SEALS
New Seal Materials, R. C. Grasby Oc 20-21
New Uses for Piston Rings, F. A. Robbins Se 51-53
Seals for Aircraft Gas Turbines, J. B. Stevens, Joseph Pal-
sulich, R. H. Riedel, J. W. Pennington, T. C. Kuchler,
E. J. Taschenberg, R. L. Johnson, M. A. Swikert, and
J. M. Bailey Se 46-50
The Controlled Gap Seal, R. W. Blair No 44
- SEAPLANES
Flying Aircraft Carriers Will Soon Be Feasible,
Grover Loening Ap 20-23
- SEGEL, LEONARD
Car Control and Stability Characteristics De 68-72
- SELBY, T. W.
Multigrade Oil Problems Se 29-33
(Co-authors G. K. Malone, F. B. Fischl, H. H.
Horowitz, T. S. Tutwiler, R. L. Over-
cash, W. Hart, and D. J. McClure)
Study Possible Test Changes for Automatic Transmission
Fluid—Type A No 20-27
(Co-authors N. A. Hunstad and R. E. Osborne)
- SENIFF, R. W.
Locomotives Can Use Lower-Cetane Fuels Ag 60-62
(Co-author F. A. Robbins)
- SEVERY, D. M.
When A Car Crashes No 47-50
(Co-author J. H. Mathewson)
- SHAPPELL, N. H.
Douglas Aircraft Uses Scatter Diagrams My 58-60
- SHIVELY, W. E.
The Truth About Tires Se 41-43
(Co-author A. W. Bull)
- SHOT PEENING
How Shot Peening Improves Fatigue Strength,
H. J. Grover Ag 28-30
Pre-setting and Stress Peening Improve Spring Strength,
E. H. Spaulding Mr 19-21
- SIGWORTH, H. W.
New Uses for Radioactive Tracers Jan 50-53
- SIMKINS, MURRAY
Specialized or Basic Engineering Education ... Se 99-100
(Co-authors T. L. Preble, E. C. Easton,
M. C. Horine, and R. L. Stanley)
- SIMMONS, GARMON D.
Let's Tolerate the Tolerance My 85-89
- SIMPSON, W. J.
Elastomers Are Improving Mr 44-46
- SIMS, W. D.
Valve Burning Ap 53
- SMICK, A. E.
Discussion of "Design Simplifies Convair Maintenance" by
J. J. Alkazin and J. C. Hoover Mr 114
- SMITH, COL. CLAUDE W.
USAF Gives Turboprops Accelerated Test ... Je 128, 130
- SMITH, MAJOR-GEN. FREDERIC H., JR.
Dynamic Threat Creates Defense Race Se 95
- SPAULDING, E. H.
Pre-setting and Stress Peening Improve Spring
Strength Mr 19-21
- SPAULDING, J. F.
Role of Purchasing Often Underestimated No 118
- SPEAR, A. G.
Weight at Birth Key to Car Design De 103
- SPERRY, P. J.
Power Loss Cut by Planet Power Steering No 123
(Co-author R. J. Erisman)
- SPINDT, R. S.
Nitrogen Plays Part in Engine Deposition Ap 120, 122
(Co-authors Court L. Wolfe and Donald R. Stevens)
- SPITLER, A. Q.
How to Winterize Construction Equipment De 60-67
(Co-authors M. G. Mardoian, F. M. Baumgardner,
T. H. Fones, W. W. Cornman, P. W.
Espenschade, and J. A. Klisch)
- SPLINTER, WILLIAM E.
Tobacco Production Needs Mechanization Jan 110
(Co-authors Charles W. Suggs and Robert W. Wilson)
- SPRINGS AND SUSPENSIONS
Leveling Devices Permit Softer Rides,
Maurice Olley Mr 54-58
Pre-setting and Stress Peening Improve Spring Strength,
E. H. Spaulding Mr 19-21
Trends in 1957 Car Design, Thomas A. Bissell .. De 17-36
- SPROWLS, GEORGE M.
Trained Analyst Can Up Your Tire Mileage Ap 120
- SQUIER, W. W.
Clinical Inspection a Boon to Maintenance ... Fe 116, 118
(Co-authors R. W. Boland, Walter E. Davis,
and H. A. Grenert)
- STANDARDIZATION
Low Section Height Oversize Tractor Tires, F. C. Walters
and W. H. Worthington Jl 75-79
Making Aeronautical Standardization Tick,
C. E. Mines Mr 22-25
Needed: A Material Qualification Agency for Certifying
Materials Used in the Aeronautic Industry,
Charles M. Miller Ap 34-35
New 4-Lamp Dual Sealed-Beam Roadlighting System,
Howard Mead and Val J. Roper Oc 52-59
SAE Aeronautic and Ground Vehicle Drafting Groups,
P. G. Belitsos Jl 58-61
- STANLEY, R. L.
Specialized or Basic Engineering Education ... Se 99-100
(Co-authors T. L. Preble, E. C. Easton,
and Murray Simkins)
- STANLEY, R. M.
Acute Pilot-Escape Problems De 44-48
(Co-authors Lt.-Col. John P. Stapp and R. J. Heymans)
- STAPP, LT.-COL. JOHN P.
Acute Pilot-Escape Problems De 44-48
(Co-authors R. J. Heymans and R. M. Stanley)
- STEEL. See Iron and Steel
- STEERING
Power Loss Cut by Planet Power Steering, P. J. Sperry and
R. J. Erisman No 123
Power Steering Trends Hint Ultimate Design,
William K. Creson Fe 123-124
The How and Why of Chrysler Coaxial Power Steering,
O. D. Dillman No 30-37
Trends in 1957 Car Design, Thomas A. Bissell .. De 17-36
- STEFL, E. P.
Grooving Aids Friction Materials De 122
(Co-author J. F. Johnson)

STEVENS, DONALD R.	
Nitrogen Plays Part in Engine Deposition ...	Ap 120, 122
(Co-authors R. S. Spindt and Court L. Wolfe)	
STEVENS, J. B.	
Seals for Aircraft Gas Turbines ...	Se 46-50
(Co-authors Joseph Palsulich, R. H. Riedel, J. W. Pennington, T. C. Kuchler, E. J. Taschenberg, R. L. Johnson, M. A. Swikert, and J. M. Bailey)	
STRESSES	
Aircraft Structures Must Fail Safe,	
J. F. McBrearty ...	Je 26-29
Designing Efficient Automobile Bodies, W. J. Clark, P. O. Johnson, and J. W. Richards ...	Ap 45-49
Fatigue Failures, Charles M. Schwartz ...	Je 49
High-Speed Aircraft Brings High Temperature Structural Problems, R. R. Heldenfels ...	Mr 28-34
How Shot Peening Improves Fatigue Strength,	
H. J. Grover ...	Ag 28-30
Pre-setting and Stress Peening Improve Spring Strength,	
E. H. Spaulding ...	Mr 19-21
Test Car Functions as Stress Detective,	
Ludvig Petersen ...	Mr 99, 101
STUKEY, A. E.	
Expense Controls ...	Ag 64-65
STUMP, C. O.	
Production Needs ...	De 49-51
SUCIU, S. N.	
The Small Gas Turbine ...	Oc 39-40
SUGGS, CHARLES W.	
Tobacco Production Needs Mechanization ...	Jan 110
(Co-authors William E. Splinter and Robert W. Wilson)	
SUPERCARGING	
Design Refinements Aid Acceleration Problems of Turbocharged High-Speed Diesels, N. M. Reiners and W. E. Woollenweber ...	Ap 24-26
Monorotor Turbocharger, Hans Bohuslav and Carl Jacobson ...	Ap 69-70
SUTTLE, W. C.	
Fuel Injection for Gasoline Automobiles ...	Jan 61-66
(Co-author F. C. Mock)	
SWALLOW, S. E.	
American Automatic Transmissions ...	Fe 36-41
SWANSON, P. J.	
Problems of Using Torque Converters in Excavators ...	Se 95-96
(Co-author J. H. Meier)	
SWARTZEL, KARL D.	
Aircraft Noise Can Be Measured ...	Mr 63-69
(Co-author Murray Kamrass)	
SWAYNE, K. G.	
Resins Gain Favor as Bearing Materials ...	Se 104, 106
(Co-authors A. J. Cheney and W. B. Happoldt)	
SWIKERT, M. A.	
Seals for Aircraft Gas Turbines ...	Se 46-50
(Co-authors J. B. Stevens, Joseph Palsulich, R. H. Riedel, J. W. Pennington, T. C. Kuchler, E. J. Taschenberg, R. L. Johnson, and J. M. Bailey)	
SWOBODA, LEO F.	
Aluminum's Future in the Automotive Industry	Jl 106-108
T	
TASCHENBERG, E. J.	
Seals for Aircraft Gas Turbines ...	Se 46-50
(Co-authors J. B. Stevens, Joseph Palsulich, R. H. Riedel, J. W. Pennington, T. C. Kuchler, R. L. Johnson, M. A. Swikert, and J. M. Bailey)	
TAUSSIG, W. A.	
Streamlined Maintenance Cuts Costs ...	Jan 69-71

TAYLOR, J. E.	
Discussion of "Car Air Conditioners Lower RVP Limits" by M. R. Morrow ...	De 111
TERRY, S. L.	
Headlinings Can Produce Headaches ...	No 120, 123
THOMAS, T. H.	
Fight Against Fade ...	Je 40-45
(Co-authors J. W. Kinchin, D. P. Dyer, C. L. Eksergian, W. B. Love, and D. E. Hobson)	
THURSTON, K. W.	
Nomograph Aids Study of Knock ...	Ag 20-24
(Co-author R. V. Kerley)	
TIPTON, STUART, G.	
We Can't Afford NOT to Have Efficient Air Traffic Control ...	Se 22-23
TIRES AND RIMS	
Cornering Can Wear Tires Rapidly, V. E. Gough	Jan 27-29
High Speed Tire Meets Growing Need,	
M. P. Hershey ...	Se 114, 116
High-Speed Tire Performance, T. J. P. Joy, D. C. Hartley, and D. M. Turner ...	Mr 26-27
Look! No Wheels! The Rolligon Tire, C. J. Ford and L. U. G. Nilsson ...	Ap 108, 110
Low Section Height Oversize Tractor Tires, F. C. Walters and W. H. Worthington ...	Jl 75-79
Recap Your Own Tires, E. B. Ogden ...	Jl 37
The Truth About Tires, A. W. Bull and W. E. Shively ...	Se 41-43
Tire Traction, A. H. Easton ...	Mr 48
Trained Analyst Can Up Your Tire Mileage,	
George M. Sprowls ...	Ap 120
Trends in 1957 Car Design, Thomas A. Bissell ...	De 17-36
Tubeless Tire Boon to Earthmovers,	
W. P. MacKusick ...	De 107
Tubeless Tires Please Truck Operators,	
Henry Jennings ...	Ag 66-67
Tubeless Tires Reduce Truck Weight,	
L. L. Baldwin ...	Je 116, 118
TITANIUM	
Forging Super Alloys, E. Foley ...	Se 35-36
Processes for Tomorrow, T. R. Linton ...	Je 67-69
TOWLE, GEORGE	
How to Take the Roar Out of the Lion—or "Silencing the Jet Engine Is Now Possible" ...	Jan 67-68
(Co-author John Tyler)	
TRANSMISSIONS, AUTOMATIC	
Accelerations Costly in Terms of Noise,	
L. M. Ball ...	No 106, 108, 110
All-Wheel Drives, H. C. McCaslin and G. W. Scharback ...	Fe 62
American Automatic Transmissions,	
S. E. Swallow ...	Fe 36-41
Grooving Aids Friction Materials, J. F. Johnson and E. P. Steff ...	De 122
Lincoln's Turbo Drive Transmission,	
H. G. English ...	Fe 60-62
New Seal Materials, R. C. Grasby ...	Oc 20-21
New Transmissions Raise Gear Problems, William C. Mertens and Frank Zuzich ...	Oc 100, 102
Problems of Using Torque Converters in Excavators, P. J. Swanson and J. H. Meier ...	Se 95-96
Study Possible Test Changes for Automatic Transmission Fluid—Type A, N. A. Hunstad, T. W. Selby, and R. E. Osborne ...	No 20-27
The Allison TC-12 Torqmatic Transmission, R. C. Williams, H. C. Kirtland, and C. M. Jordan ...	Fe 67-70
The Powermatic, H. O. Flynn ...	Fe 63-66
Tournamatic Transmission, John H. Hyler ...	Ag 27
Transmissions—Where They Go from Here,	
Forest McFarland ...	Oc 114
Trends in 1957 Car Design, Thomas A. Bissell ...	De 17-36
Twin Ultramatic Transmission, C. J. Lucia and J. Z. DeLorean ...	Fe 57-59
What's New About the 1956 Dynaflo,	
R. J. Gorsky ...	Fe 50-56
What's New About the 1956 Hydra-Matic, Kenneth W. Gage and P. J. Rhoads ...	Fe 42-49

TRANSMISSIONS, HAND-CONTROLLED

- Drive Line Choice Is No Simple Matter,
John Borland Ag 112, 115
Loggers Need a More Flexible Transmission,
Gordon A. MacGregor Je 130
Our Best Trucks Have Compatible Power Train Elements,
C. B. Rawson Mr 49-51

TRAYER, ROBERT I.

- Discussion of "B & O Tests Air Filters on Diesels" by
Pell Kangas Je 136

TRUCK DESIGN AND PERFORMANCE

- Aids To Vehicle Design, Ross A. McFarland ... Ag 43-45
Our Best Trucks Have Compatible Power Train Elements,
C. B. Rawson Mr 49-51
P-I-E's Prototype Dromedary, L. H. Peterson ... Ag 31-33
Styling Trucks Multiplies Problems,
Theodore Ornas Je 120, 122
Truck Cabs, B. C. Harris Je 39

TRUCK ENGINES. See Engines, Truck and Bus

TRUCK MAINTENANCE

- Better Mileage, Fewer Failures, E. B. Ogden Mr 18
Incentive Programs Cut Maintenance Costs,
W. W. Vandercook Fe 124, 126
Reo's New Gold Comet V-8, R. M. Tullos and
Ray Ranta Ap 19
Streamlined Maintenance Cuts Costs,
W. A. Taussig Jan 69-71
Tighten P.M. Program to Curb Human Failings,
J. H. Dolan Ap 122
Too Many Guesses in Truck Selection,
Robert Cass Fe 120, 122
Undercarriage Sealer A "Must" for Protection,
G. A. Pethick Mr 118

TRUCK TRACTORS AND TRAILERS

- P-I-E's Prototype Dromedary, L. H. Peterson ... Ag 31-33
Streamlined Maintenance Cuts Costs,
W. A. Taussig Jan 69-71
Valve Should Protect Against Brake Air Leaks,
Homer T. Seale Fe 112

TULLOS, R. M.

- Reo's New Gold Comet V-8 Ap 19
(Co-author Ray Ranta)

TURNER, D. M.

- High-Speed Tire Performance Mr 26-27
(Co-authors T. J. P. Joy and D. C. Hartley)

TURUNEN, W. A.

- General Motors Firebird II's Engine Jl 48, 52-54
(Co-author J. S. Collman)

TUTWILER, T. S.

- Multigrade Oil Problems Se 29-33
(Co-authors G. K. Malone, T. W. Selby, F. B. Fischl,
H. H. Horowitz, R. L. Overcash, W. Hart,
and D. J. McClure)

TYLER, J. M.

- Inlet Noise Reflector De 57-59
(Co-author R. Kriehoff)

TYLER, JOHN

- How to Take the Roar Out of the Lion—or "Silencing the
Jet Engine Is Now Possible" Jan 67-68
(Co-author George Towle)

U

UNDERWOOD, A. F.

- GMR 4-4 Hyprex Free Piston Turbine Engine ... Je 60-66
How "Free" Should a Free-Piston Gasifier Be Oc 23

USOW, KARL H.

- Simplify Maintenance Is the Plea of the Army Fe 110-112
(Co-author R. C. Navarin)

UYEHARA, O. A.

- Cooperative Studies Are Solving Mysteries of Diesel Igni-
tion Delay De 38-42
(Co-authors T. C. Yu, P. S. Myers, R. N. Collins,
K. Mahadevan, M. M. El Wakil, R. W. Hurn,
J. O. Chase, C. F. Ellis, and K. J. Hughes)

V

VALENTINE, B. G.

- The Model 70 Tractor Diesel Engine Jan 47-49
(Co-author Russell Candee)

VALVES AND GEAR

- Favors Reed Valve for Two-Cycle Engines,
S. D. Pollow Mr 108, 110
New American Motors V-8, J. F. Adamson, C. E. Burke,
and D. V. Potter Jl 38-42
Valve Burning, W. D. Sims Ap 53

VANDERCOOK, W. W.

- Incentive Programs Cut Maintenance Costs ... Fe 124, 126

VAPOR LOCK

- Are You Satisfied with the Gasoline You're Using, W. P.
Dugan, F. T. Finnigan, J. G. Moxey, and
Gilbert Way Se 71-73
Car Air Conditioners Lower RVP Limits,
M. R. Morrow De 111
Faster Fuel Pump Means Less Vapor Lock,
R. A. Randall De 84, 101
Only 1363 "Vapor Locks" Found in Survey of 6,000,000
Cars, H. I. Wilson, R. S. Fein, J. R. Muenger, and
R. S. Wetmiller Ap 66-69
Vapor Lock Tolerance, R. E. Barnum, P. J. Clarke, and
J. P. Hamer Mr 34

VIBRATIONS

- Vibration Tester Handles Large Units, W. C. Schreyer and
Kenneth B. Yost De 107, 109, 111

VINCENT, E. T.

- 200-HP Gas Turbine Automobile Je 18-25
(Co-authors F. L. Schwartz, Charles Lipson, A. K.
Lahti, Charles Harris, and U. O. Lahti)

W

WALTERS, F. C.

- Low Section Height Oversize Tractor Tires Jl 75-79
(Co-author W. H. Worthington)

WANTIN, R. W.

- On-Off Fans Save Horsepower Oc 66-70
(Co-authors H. A. Reynolds, D. F. Lemaux,
K. A. Beier, and J. H. Booth)

WARREN, J. A.

- 2 New Tools Aid Engine Research ... Se 108, 110, 112, 114
(Co-authors R. R. Bockemuehl, E. F.
Weller, and J. B. Hinkamp)

WATSON, C. E.

- Discussion of "B & O Tests Air Filters on Diesels" by
Pell Kangas Je 134, 136

WAY, GILBERT

- Are You Satisfied with the Gasoline You're Using Se 71-73
(Co-authors W. P. Dugan, F. T. Finnigan,
and J. G. Moxey)

WAY, LT. J. H.

- Data Show Need for Better Lab Tests Se 102
(Co-author T. F. Davidson)

WEIGEL, R. A.

- Keep Them Hot and Out of Drafts No 124
(Co-authors D. R. Ferris and A. W. Koby)

WELDING

- Magnesium Castings Salvaged by Welding,
W. A. Beck Ag 116, 118
New Techniques Advance Welding Art,
Clifford LaDew Je 122, 124, 126

WELLER, E. F.

- 2 New Tools Aid Engine Research ... Se 108, 110, 112, 114
(Co-authors R. R. Bockemuehl, J. A. Warren,
and J. B. Hinkamp)

WELLINGTON, JOSEPH C., JR.

- 3 Case Histories Point Up Communications De 54-56

- WETMILLER, R. S.**
Only 1363 "Vapor Locks" Found in Survey of 6,000,000 Cars Ap 66-69
(Co-authors H. I. Wilson, R. S. Fein, and J. R. Muenger)
- WHEATLEY, JOHN B.**
Allison T56 Turboprop Features Flexibility Fe 23-26
(Co-authors D. G. Zimmerman and R. W. Hicks)
- WHEELS**
Trends in 1957 Car Design, Thomas A. Bissell .. De 17-36
- WHITE, P. C.**
Increasing Fuel Sensitivity Challenges Engine Designers Se 54-55
(Co-authors A. P. Boyd and C. J. Domke)
- WICHSER, R. F.**
Aircraft Testing Grows Ever More Complicated Mr 116, 118
- WILE, L. E.**
Shell Molding No 53-55
- WILLETT, H. L., JR.**
Discussion of "Too Many Guesses in Truck Selection" by Robert Cass Fe 122
- WILLETT, HOWARD L.**
Discussion of "Multigrade Oils Cut Fuel Oil Costs" by A. A. Dach Ap 112
- WILLIAMS, R. C.**
Euclid's TC-12 Twin Crawler Tractor Fe 71-72
The Allison TC-12 Torqmatic Transmission Fe 67-70
(Co-authors H. C. Kirtland and C. M. Jordan)
- WILLIAMS, R. K.**
Discussion of "Study Possible Test Changes for Automatic Transmission Fluid—Type A" by N. A. Hunstad, T. W. Selby, and R. E. Osborne No 24
- WILLIAMS, R. O.**
Discussion of "Accelerations Costly in Terms of Noise" by L. M. Ball No 110
- WILLIAMS, WALTER C.**
High-Speed, High-Altitude Airplanes Ag 54-57
- WILSON, H. I.**
Only 1363 "Vapor Locks" Found in Survey of 6,000,000 Cars Ap 66-69
(Co-authors R. S. Fein, J. R. Muenger, and R. S. Wetmiller)
- WILSON, ROBERT W.**
Tobacco Production Needs Mechanization Jan 110
(Co-authors William E. Splinter and Charles W. Suggs)
- WOLFE, COURT L.**
Nitrogen Plays Part in Engine Deposition ... Ap 120, 122
(Co-authors R. S. Spindt and Donald R. Stevens)
- WOODS, R. J.**
Variety of VTOL Aircraft Types Now Feasible .. J1 68-74
(Co-authors K. S. Coward, E. R. Hinz, and Charles H. Zimmerman)
- WOOLLENWEBER, W. E.**
Design Refinements Aid Acceleration Problems of Turbocharged High-Speed Diesels Ap 24-26
(Co-author N. M. Reiners)
- WORTHINGTON, W. H.**
Low Section Height Oversize Tractor Tires J1 75-79
(Co-author F. C. Walters)
- WYNN, A. L.**
Turbojets Promise Reasonable Upkeep Se 100, 102
(Co-authors V. L. Schatz and R. W. Remke)
- Y**
- YOST, KENNETH B.**
Vibration Tester Handles Large Units .. De 107, 109, 111
(Co-author W. C. Schreyer)
- YOUNG, H. D.**
Farm Tractor Fuels De 77
- YOUNG, JOHN D.**
Molded Nylon Used for Gears and Bearings .. Fe 108-109
- YU, T. C.**
Cooperative Studies Are Solving Mysteries of Diesel Ignition Delay De 38-42
(Co-authors O. A. Uyehara, P. S. Myers, R. N. Collins, K. Mahadevan, M. M. El Wakil, R. W. Hurn, J. O. Chase, C. F. Ellis, and K. J. Hughes)
- Z**
- ZIEGLER, G. N.**
Discussion of "How To Choose Anti-friction Bearing Materials" by John Preston, Jerome Mogul, and George Floroff Se 59
- ZIMMERMAN, CHARLES H.**
Variety of VTOL Aircraft Types Now Feasible .. J1 68-74
(Co-authors K. S. Coward, E. R. Hinz, and R. J. Woods)
- ZIMMERMAN, D. G.**
Allison T56 Turboprop Features Flexibility Fe 23-26
(Co-authors John B. Wheatley and R. W. Hicks)
- ZUZICH, FRANK**
New Transmissions Raise Gear Problems Oc 100, 102
(Co-author William C. Mertens)

SUPPLEMENT

Note: This is a listing, alphabetical by authors, of every paper which appeared in SAE Journal in 1956 with the title of the original paper from which the abridgment was made.
(Articles indexed on pages 1-22 are classified and listed only by the headlines under which they were abridged in SAE Journal.)

- ADAMSON, J. F.**
The New American Motors V-8 Engine J1 38-42
(Co-authors C. E. Burre and D. V. Potter)
- AINSLEY, W. G.**
CRL Oil Test Engine Je 46-48
(Co-author A. E. Cleveland)
- ALBRECHT, R. H.**
STOP Sludge and GO Clean Se 60-63
(Co-authors R. I. Potter and Kent Hyatt)
- ALFORD, J. S.**
Turbine Engine Stall from the Design Point of View Oc 28-36
- ALKAZIN, J. J.**
Air Transport Design for the Human Element of Airline Service and Maintenance Personnel Mr 112, 114
(Co-author J. C. Hoover)
- ALLEN, R. C.**
Nuclear Power and the Machinery Builder Ap 60-65

- ANDERSON, J. P.
Control of Manufacturing Costs My 61-62
- ANDERSON, JONAS
Preignition in Aircraft Reciprocating Engines Oc 60-65
- APPLE, LT.-COM. ROBERT E.
Hydrofoil Craft: Present Status and the Central Problems Ag 46-48
- AUGUSTINE, CARL A.
Automation and Limited Quantity Production No 104, 106
- BAILEY, J. M.
Wear of Materials for High Temperature Dynamic Seals Se 46-50
(Co-authors R. L. Johnson and M. A. Swikert)
- BALDWIN, L. L.
Tire Design—Present and Future Je 116, 118
- BALL, L. M.
Engine Noise During Acceleration No 106, 108, 110
- BARNES, GILBERT C.
A Look at Some Turbine Bearing Problems Ap 114, 116, 118
(Co-author Earle A. Ryder)
- BARNUM, R. E.
Vapor Locking Characteristics of Passenger Cars .. Mr 34
(Co-authors P. J. Clarke and J. P. Hamer)
- BARR, CAPT. NORMAN LEE
The Visibility of Airport Runways Ag 108, 110
(Co-authors Lt. J.G. Thomas A. Hussman, Jr. and Lt. J.G. James F. Parker)
- BARTLETT, J. L.
Auxiliary Power and Air Conditioning for the Self-Contained Airplane Fe 114, 116
(Co-author P. C. Scofield)
- BARTON, J. W.
Control of Manufacturing Costs My 60-61
- BAUMGARDNER, F. M.
Winterization of Construction Equipment De 60-67
(Co-authors M. G. Mardoian, T. H. Fones, W. W. Cornman, A. Q. Spittler, P. W. Espenschade, and J. A. Klisch)
- BEACHLER, ROBERT R., JR.
Lab Tests Simulate Kinetic Environment Oc 74-75
- BEARD, M. G.
Some Safety Aspects of Gas Turbines De 43
(Co-author F. W. Kolk)
- BEARDSLEY, G. R.
International Harvester's Approach to the V-8 Engine Program Se 25-28
(Co-author A. A. Catlin)
- BECK, W. A.
Weld Repair of Aircraft Quality Magnesium Castings Ag 116, 118
- BEIER, K. A.
Some of the Reasons for Inefficient and Noisy Automotive Fan Installations Oc 66-70
- BEKKER, M. G.
Present State of Off-road Locomotion and Its Future Se 73
- BELTSOS, P. G.
SAE Aeronautic and Ground Vehicle Drafting Groups Jl 58-61
- BENSER, WILLIAM A.
Compressor Stall Problems in Gas-Turbine Type Aircraft Engines Oc 28-36
(Co-author Harold B. Finger)
- BERGGREN, L. E.
Small Turbojet Engine Control Requirements Oc 41
- BERLOT, R. R.
Analysis of a Hydraulic Servo Using a Pressure Control Valve De 116, 118
- BERTRAND, I. L.
Machining, Tracer and Profile My 56-57
- BEVERLY, EDMOND J.
Controlled Economical Tooling and Shop Methods Jan 29
- BIDWELL, H. H.
Designing for Maintenance Oc 76-78
- BIDWELL, J. B.
The Experimental Chassis for the Firebird II ... Jl 49-52
(Co-author R. E. Owen)
- BILLEY, LEINO H.
Development Engineering and Application to Muffler Manufacture for Heavy-Duty Engines Mr 102
- BISSELL, THOMAS A.
Trends in 1957 Car Design De 17-36
- BLAIR, R. W.
Controlled Gap Seal No 44
- BLASCHKE, T. C.
Shaft Gas Turbines for Helicopters Mr 70-75
(Co-authors W. S. Miller, Jr. and R. P. Krebs)
- BOCKEMUEHL, R. R.
Instrument for Recording Cylinder Pressure versus Crank Angle of Internal-Combustion Engine .. Se 108, 110, 112
(Co-author E. F. Weller)
- BODEMULLER, R.
Control Approaches to Solution of Compressor Stall Oc 28-36
(Co-author W. A. Gebhardt)
- BOHUSLAV, HANS
Supercharging of High Speed Diesels Ap 69-70
(Co-author Carl Jacobson)
- BOLAND, R. W.
A Fresh Approach to Ignition Analysis Fe 116, 118
- BOOTH, J. H.
Hydraulic Fan Drive Oc 66-70
- BORLAND, JOHN
Conventional Drive Lines As Applied to Earthmoving Machinery Ag 112, 115
- BOYD, A. P.
Future Gasolines for Future Engines Se 54-55
(Co-authors P. C. White and C. J. Domke)
- BRAHM, CHARLES B.
Propeller Synchrophaser for Aircraft Noise Control Ap 50-53
(Co-author G.E. Sanderson)
- BRAY, ULRIC B.
Development and Use of Additives in Lubricating Oils Mr 104-106
- BUCEY, BOYD K.
Development of Airframe Manufacturing Methods My 74-78
- BULL, A. W.
Rubber on Wheels Se 41-43
(Co-author W. E. Shively)
- BUNKER, COL. WILLIAM B.
Individual Air Mobility and the Soldier No 110, 112
- BURKE, C. E.
The New American Motors V-8 Engine Jl 38-42
(Co-authors J. F. Adamson and D. V. Potter)

- BURKHALTER, R. R.**
Lower Silhouette Mr 46
(Co-author P. J. Mazziotti)
- BURROWS, W. F.**
Design and Development Experience—White V-106
Diesel Je 30-34
(Co-author H. W. Hanners)
- CALDARA, BRIG-GEN. JOSEPH D.**
Flight Safety and Problems that Can Be Seen for the
Future De 51
- CAMPBELL, J. M.**
The Big Dividend from Research in the Greatest Power
Industry in the World Je 17
- CANDEE, RUSSELL**
The John Deere Model 70 Tractor Diesel
Engine Jan 47-49
(Co-author B. G. Valentine)
- CAPIAUX, RAYMOND**
A Method for Correcting Existing Jet Engine
Performance Ap 122
- CARD, H. E.**
Foreign Object Ingestion in Turbojet
Engines Ap 112, 114,
(Co-author R. L. Mathias)
- CARTER, A. J.**
Car Heater Bodies and Ducts Jan 36-44
- CASS, ROBERT**
Vehicle Selection and Its Influence on Maintenance
Cost Fe 120, 122
- CATLIN, A. A.**
International Harvester's Approach to the V-8 Engine
Program Se 25-28
(Co-author G. R. Beardsley)
- CATTRELL, W. M.**
The Design and Development of High-Temperature
Pneumatic Ducting Systems for Aircraft Jan 45-46
- CHAMPLIN, E. T.**
Essential Factors in Manufacturing Gears and Heat-
Treating Techniques Je 112, 114
- CHANDLER, J. M.**
Once More About Mechanical Octanes Ag 51-53
(Co-author O. Enoch)
- CHAO, DR. W. W.**
Heat Exchangers for Small Regenerative Gas
Turbines Oc 38-39
- CHASE, J. O.**
Fuel Heat Gain and Release in Bomb
Autoignition De 39-40
(Co-authors R. W. Hurn, C. F. Ellis,
and K. J. Hughes)
- CHATHAM, RICHARD T., JR.**
Your Living Room on Wheels Je 126
- CHATTERTON, ERNEST**
Napier Deltic Diesel Engine De 52-53
- CHENEY, A. J.**
Zytel Nylon Resin and Teflon Tetrafluorethylene Resin
as Bearing Materials Se 104, 106
(Co-authors W. B. Happoldt and K. G. Swayne)
- CHRISTENSEN, L. M.**
Forging Techniques to Reduce Machining Ag 34-38
- CHRISTENSON, P. A.**
Production Control and Its Effect on
Manufacturing Mr 110, 112
- CLARK, W. J.**
Efficiency of the Automobile Body Ap 45-49
- CLARKE, P. J.**
Vapor Locking Characteristics of Passenger Cars ... Mr 34
(Co-authors R. E. Barnum and J. P. Hamer)
- CLEVELAND, A. E.**
CLR Oil Test Engine Je 46-48
(Co-author W. G. Ainsley)
- COFFEY, BILL L.**
The Design of a Dynamic Braking Device for Recovery
of Ballistic Type Guided Missiles De 37
- COFFIN, J. G.**
Physical Properties of Molded Parts Jan 36-44
- COLE, F. B., JR.**
Systems Environmental Tests Are Worth While ... Oc 75
- COLLINS, R. N.**
Physical and Chemical Ignition Delay in an Operating
Diesel Engine Using the Hot-Motored
Technique De 38, 40-41
(Co-authors T. C. Yu, O. A. Uyehara, P. S.
Myers, and K. Mahadevan)
- COLLMAN, J. S.**
The Regenerative Whirlfire Engine for
Firebird II Jl 48, 52-54
(Co-author W. A. Turunen)
- CONWAY, T. G.**
Machining Techniques of Precision-Machined
Parts Mr 99; Jl 43-47
- COPP, H. F.**
The Continental Mark II—A Design Story Ap 27-33
- CORNMAN, W. W.**
Winterization of Construction Equipment De 60-67
(Co-authors M. G. Mardoian, F. M. Baumgardner,
T. H. Fones, A. Q. Spitler, P. W. Espen-
schade, and J. A. Klisch)
- COUSINS, CAPT. RICHARD D.**
USAF Experience to Date with Turboprop
Aircraft Jan 21-23
- COWARD, K. S.**
An Appraisal of VTOL Aircraft Jl 68-74
(Co-author E. R. Hinz)
- COX, JOHN C.**
Dirt Proofing Engines with Positive Air Filtration .. Se 98
(Co-author Herbert R. Otto, Jr.)
- COX, JOHN H.**
Tufted Carpet for Auto Use Je 126
- CRAIG, H. E.**
Open Hearth Melting Practices Related to Production of
Flat Rolled Steel for the Automotive Industry .. Oc 114
- CRESON, WILLIAM K.**
Power Steering in 1955 Fe 123-124
- CROFUT, W.**
High-Quality Plastics Components for Use in Guided Mis-
sile and Airborne Radar Systems My 64-69
(Co-author L. B. Keller)
- CROSBY, RALPH J.**
What Is Ahead in Automotive Safety Fe 126
- DACH, A. A.**
Effect of New Lubricants on Stretching Out Preventive
Maintenance Intervals Ap 110, 112
- DANIEL, RAY M.**
Inadequate Environment Data Limit Aircraft
Design Oc 73
- DAVIDSON, T. F.**
Correlation Between Laboratory and Engine Performance
of Synthetic Turbine Lubricants Se 102
(Co-author Lt. J. H. Way)

- DAVIS, WALTER E.
Clinical Inspection Fe 116, 118
- DAVISON, ELMER H.
Compressor and Turbine Matching Considerations in Tur-
boprop Engines Ag 85
- DAY, W. E.
Drive Line and Axle Noise No 63
(Co-author W. P. Michell)
- DeGRAY, DR. R. J.
The Chevrolet L-4 Test; What Does It
Measure Se 116, 118
- DELANEY, GEORGE A.
Planning for Progress Mr 17-18
- DeLOREAN, J. Z.
The Twin Ultramatic Transmission Fe 56-59
(Co-author C. J. Lucia)
- DEMIRJIAN, STEPHEN G.
Wrought Jet Engine Bucket Alloys JI 79
- DERRYBERRY, K. R.
Fuselages Je 69
- deVIENNE, JACQUES
Avoidance of Aerial Collisions Using Pictorial Traffic Dis-
play in the Cockpit No 38-41
- DILLMAN, O. D.
Precision—The Prime Factor in Power
Steering No 30-37
- DINNING, R. G.
Short-Haul Transports Jan 32-35
- DOLAN, J. H.
Tightening Up A Preventive Maintenance
Program Ap 122
- DOMAN, CARL T.
Service Is Our Business Se 99
- DOMKE, C. J.
Future Gasolines for Future Engines Se 54-55
(Co-authors A. P. Boyd and P. C. White)
- DUBINSKI, LEO
Miracle Batteries Ap 44
- DuBRIDGE, LEE A.
Science, Technology—and Men Jan 17-20
- DUGAN, W. P.
A Recent Look at Some Problems Related to Gasoline
Volatility Se 71-73
(Co-authors F. T. Finnigan, J. G. Moxey,
and Gilbert Way)
- DYER, D. P.
The Budd Automotive Disc Brake Je 40-45
(Co-author C. L. Eksergian)
- DYMENT, J. T.
Engineering Education Ag 63-64
- EASTON, A. H.
Progress in Tire Traction Mr 48
- EASTON, E. C.
Education for Automotive Engineering Se 99-100
(Co-authors T. L. Preble, Murray Simkins,
M. C. Horine, and R. L. Stanley)
- EDWARDS, ALBERT D.
Radiography of Aircraft Structure for Safety and
Economy Se 108
- EKSERGIAN, C. L.
The Budd Automotive Disc Brake Je 40-45
(Co-author D. P. Dyer)
- ELLIS, C. F.
Fuel Heat Gain and Release in Bomb
Autoignition De 39-40
(Co-authors R. W. Hurn, J. O. Chase,
and K. J. Hughes)
- EL WAKIL, M. M.
Fuel Vaporization and Ignition Lag in Diesel
Combustion De 38, 41-42
(Co-authors P. S. Myers and O. A. Uyehara)
- ENGLISH, H. G.
Lincoln Turbo Drive Transmission Fe 60-62
- ENOCH, O.
Once More About Mechanical Octanes Ag 51-53
(Co-author J. M. Chandler)
- ERISMAN, R. J.
Planet Power Steering as Applied to Crawler
Tractors No 123
(Co-author P. J. Sperry)
- ESPENSCHADE, P. W.
Winterization of Construction Equipment De 60-67
(Co-authors M. G. Mardoian, F. M. Baumgardner,
T. H. Fones, W. W. Cornman, A. Q.
Spitler, and J. A. Klisch)
- ESTEY, MELVIN E.
Piston Rings—Art or Science Mr 39-43
- EVEREST, LT.-COL. F. K., JR.
Space Travel Oc 71-72
- FARLING, H. L.
Flat Rolling of Automobile Steel Oc 98
- FARQUHAR, GORDON
Glimpses of the DC-8 Ag 49-50
- FEIN, R. S.
Road Vapor-Lock Incidence Ap 66-69
(Co-authors J. R. Muenger, H. I. Wilson,
and R. S. Wetmiller)
- FELDMAN, HYMAN
Field Testing of Parts and Supplies Oc 118, 120
(Co-authors James P. Moreland and E. N. Hatch)
- FERRIS, D. R.
Engine Temperature Control—Why—How No 124
(Co-authors R. A. Weigel and A. W. Koby)
- FINGER, HAROLD B.
Compressor Stall Problems in Gas-Turbine Type Aircraft
Engines Oc 28-36
(Co-author William A. Benser)
- FINNIGAN, F. T.
A Recent Look at Some Problems Related to Gasoline
Volatility Se 71-73
(Co-authors W. P. Dugan, J. G. Moxey,
and Gilbert Way)
- FIGORE, FRANK
Are We Properly Evaluating Future Supervisors and
Specialists My 46-48
- FISCHL, F. B.
Cold Starting with V.I. Improved Multigrade
Oils Se 29-33
(Co-authors H. H. Horowitz and T. S. Tutwiler)
- FLOROFF, GEORGE
Anti-friction Bearing Materials for Aircraft
Powerplants Se 56-59
(Co-authors John Preston and Jerome Mogul)
- FLYNN, GREGORY, JR.
How to Burn Heavy Diesel Fuels Mr 35-38
Observations on 25,000 Hours of Free Piston Engine
Operation Se 64-70
- FLYNN, H. O.
A New Automatic Transmission for Chevrolet Heavy-Duty
Trucks Fe 63-66

- FOLEY, E.**
Forging of Rare Metals Se 35-36
- FONES, T. H.**
Winterization of Construction Equipment De 60-67
(Co-authors M. G. Mardoian, F. M. Baumgardner,
W. W. Cornman, A. Q. Spitler, P. W.
Espenschied, and J. A. Klisch)
- FORD, C. J.**
Goodyear Rolligon Tires—A New Approach to Vehicular
Mobility Ap 108, 110
(Co-author L. U. G. Nilsson)
- FRANK, R. S.**
A Billion Engine Hours on Aluminum Bearings .. Je 37-39
(Co-author W. J. Lux)
- FREDERICKS, R. H.**
Industry Report on Automotive Safety Research .. Oc 25-27
- FREMONT, H. A.**
Design Requirements of a Good Combustion
System Oc 39-40
(Co-author Dr. S. N. Suci)
- FREY, D. N.**
New Alloys for Automotive Turbines J1 33-36
- FRIES, B. A.**
Radioactivity As a Sensitive Tool for Measuring Engine
Deposits Jan 50-53
(Co-authors J. G. Mingle and H. W. Sigworth)
- GAGE, KENNETH W.**
The New General Motors Hydra-Matic
Transmission Fe 42-49
(Co-author P. J. Rhoads)
- GALINDO, H. F.**
Practical Engine Break-In Methods No 102, 104
- GARDNER, MAJ. ALFRED J.**
Are We Gaining on the Compressor Stall
Problem Oc 28-36
- GARON, R. J.**
Why Qualification Tests Oc 73
- GARWOOD, M. F.**
Automotive Engineering Applications of Light
Metals Mr 62
(Co-author F. H. Mason)
- GAVIN, LT-GEN. J. M.**
Technical Trends in Research and Development .. De 103
- GEBHARDT, W. A.**
Control Approaches to Solution of Compressor
Stall Oc 28-36
(Co-author R. Bodemuller)
- GERDAN, DIMITRIUS**
The Allison Power Package for the Lockheed
Electra Je 50-54
(Co-authors R. M. Hazen and R. R. LaMotte)
- GILMAN, M. M.**
Plastic Tooling My 53-55
- GINN, E. C.**
Meeting Present-day Power Requirements with a V-8
Diesel Je 30-31, 34-36
- GLASS, FRED M.**
Air Transportation and the Terminal Area Mr 21
- GLIDEWELL, J. E.**
Use of LPG in Truck Engines Mr 102, 104
- GOEBEL, K. W.**
Compressor Bleed Ducting for Auxiliary Power
Supply Ag 85
- GORSKY, R. J.**
The New Dynaflo Automatic Transmission Fe 50-56
- GOUGH, V. E.**
Practical Tire Research Jan 27-29
- GRABOWSKI, GEORGE**
Developments in Explosion and Fire Suppression
Techniques Mr 101
- GRASBY, R. C.**
Seals for Passenger-Car Automatic
Transmissions Oc 20-21
- GREEN, W. E.**
Economics of Tooling J1 108, 111
- GREGORY, A. T.**
Small Turbines for Aircraft in the Future Oc 44
- GREIG, J. W.**
Matched Metal Die Molding Process Using Premixed
Compound Jan 36-44
- GRENET, H. A.**
Clinical Inspection Fe 116, 118
- GRIMES, T. R.**
New Plastic Developments Reduce Interior Design
Problems Oc 110, 112
- GRIMM, JOHN R.**
Air Force Test Requirements Oc 74
- GROSS, F. A.**
Designing for Serviceability Oc 108
- GROVER, H. J.**
Factors by Which Shot Peening Influences the Fatigue
Strength of Parts Ag 28-30
- HAEUSLER, ROY**
Automotive Safety Engineer Se 44-45
- HAFFER, A. A.**
The Small Gas Turbine Cycle and Exhaust-Heat
Recovery Oc 37-38
- HAFFER, PAUL R.**
More Strength—Per Pound—Per Dollar No 124, 126
- HALABY, N. E.**
The American Airspace—A National Asset or
Menace Se 18-24
- HALL, E. J.**
Tool Control De 42
- HAMER, J. P.**
Vapor Locking Characteristics of Passenger Cars .. Mr 34
(Co-authors R. E. Barnum and P. J. Clarke)
- HANINK, DEAN K.**
Engineering Requirements for Jet Engine
Materials Ag 115-116
- HANNERS, H. W.**
Design and Development Experience—White V-106
Diesel Je 30-34
(Co-author W. F. Burrows)
- HAPPOLDT, W. B.**
Zytel Nylon Resin and Teflon Tetrafluoroethylene Resin
as Bearing Materials Se 104, 106
(Co-authors A. J. Cheney and K. G. Swayne)
- HARRIS, B. C.**
Engineering Considerations for Truck Cabs Je 39
- HARRIS, CHARLES**
The Next Decade and the Automobile Je 18-25
(Co-authors E. T. Vincent, F. L. Schwartz, Charles
Lipson, A. K. Lahti, and U. O. Lahti)
- HART, W.**
How Do Volatility, Viscosity, and V.I. Improvers Affect Oil
Consumption Se 29-33
(Co-authors R. L. Overcash and D. J. McClure)

- HARTLEY, D. C.**
Tires for High Performance Cars Mr 26-27
(Co-authors T. J. P. Joy and D. M. Turner)
- HARVEY, HUGH**
Fuels and Fuel Systems for Turbine Transports . Je 55-59
- HARWOOD, J. J.**
New Materials for Small Gas Turbines Oc 41-43
- HATCH, E. N.**
Field Testing of Parts and Supplies Oc 118, 120
(Co-authors Hyman Feldman and James P. Moreland)
- HAYS, D. F.**
Process Control Je 118, 120
- HAYS, L. C.**
New Developments in Free Machining Steels ... No 45-46
- HAZEN, R. M.**
The Allison Power Package for the Lockheed
Electra Je 50-54
(Co-authors Dimitrius Gerdan and R. R. LaMotte)
- HEALD, E. R.**
Stability and Control of Piloted Aircraft at High
Altitudes Ag 25-27
- HEITSHU, D. C.**
The Self Propelled Hillside Combine Ag 19
- HELDENFELS, R. R.**
Some Elevated Temperature Structural Problems of High-
Speed Aircraft Mr 28-34
- HERBERG, R. L.**
Plant Layout Oc 95-96
- HERMANN, RUDOLPH**
Engine Inlet Air Diffuser Controls for Supersonic
Aircraft Oc 95
- HEROLD, RICHARD**
Present Status of Diesel Locomotives in Europe .. My 128
- HERSEY, DONALD S.**
Personal Economics for Young Engineers No 55
- HERSHEY, M. P.**
New High Speed Tires Se 114, 116
- HETH, SHERMAN C.**
Development of Safety Clutch for Tractor P.T.O.
Drives Jan 30
- HEYMANS, R. J.**
Crew Survival in the Jet Age De 44-48
(Co-author R. M. Stanley)
- HIBBARD, HALL L.**
Electra: Turboprop Transport for 1958
Delivery Jan 56-60
- HICKS, R. W.**
The Allison T56 Turboprop Aircraft Engine Fe 23-26
(Co-authors John B. Wheatley and D. G. Zimmerman)
- HILL, H. C.**
Vibration in Gas Turbine Engines Oc 40
- HINKAMP, J. B.**
New Instrumentation for Engine Combustion
Studies Se 112, 114
(Co-author J. A. Warren)
- HINZ, E. R.**
An Appraisal of VTOL Aircraft Jl 68-74
(Co-author K. S. Coward)
- HOBSON, D. E.**
The New Studebaker Flared Cross-Rib Drum
Brake Je 40-45
(Co-author W. B. Love)
- HOLADAY, WILLIAM M.**
Fuel for Thought Oc 17-20
- HOOD, J. HALL**
Air Conditioning and Pressurization Equipment Require-
ments for High Performance Flight De 112, 114
(Co-author A. R. Perl)
- HOOVER, C. E.**
Glass Fiber Reinforcement Jan 36-44
- HOOVER, COM. GEORGE W.**
Integration of Aircraft Instrumentation Jan 72-74
- HOOVER, J. C.**
Air Transport Design for the Human Element of Airline
Service and Maintenance Personnel Mr 112, 114
(Co-author J. J. Alkazin)
- HOPPENS, H. A.**
Polyester Resin Jan 36-44
- HORINE, M. C.**
Education for Automotive Engineering Se 99-100
(Co-authors T. L. Preble, E. C. Easton, Murray
Simkins, and R. L. Stanley)
- HOROWITZ, H. H.**
Cold Starting with V.I. Improved Multigrade
Oils Se 29-33
(Co-authors F. B. Fischl and T. S. Tutwiler)
- HÖSSACK, ALEX**
Simmonds Fuel Injection System for Gasoline
Engines Fe 27-35
- HOWE, W. A.**
Factors Affecting Diesel Smoke in Highway
Operation Ap 33
Modern Oils for Modern Engines Oc 112
- HOWELL, L. E.**
Indoctrination and Training of College Graduates for
Manufacturing Ap 22-24
- HUDDIE, D. P.**
The Development of Rolls-Royce Propelled Turbine
Engines Ag 39
- HUGHES, K. J.**
Fuel Heat Gain and Release in Bomb
Autoignition De 39-40
(Co-authors R. W. Hurn, J. O. Chase, and C. F. Ellis)
- HUMPHREY, M. E.**
Control of Manufacturing Costs My 58-63, 69
- HUNDERE, A.**
Application of Radioactive Tracers to Engine
Research Jan 50-53
(Co-authors G. C. Lawrason and J. P. O'Meara)
- HUNSTAD, N. A.**
Present Status of Automatic Transmission Fluid,
Type A No 20-27
(Co-authors T. W. Selby and R. E. Osborne)
- HUNT, O. E.**
The Skill and the Will to Drive Safely No 64-67
- HURN, R. W.**
Fuel Heat Gain and Release in Bomb
Autoignition De 39-40
(Co-authors J. O. Chase, C. F. Ellis,
and K. J. Hughes)
- HURT, J. B.**
Powerplant Installations and Components Se 37-40
- HUSSMAN, LT. JG. THOMAS A., JR.**
The Visibility of Airport Runways Ag 108, 110
(Co-authors Capt. Norman Lee Barr and
Lt. JG. James F. Parker)
- HUTCHINSON, DAVID W.**
The Differential Gas Turbine Je 70-75

- HYATT, KENT**
STOP Sludge and GO Clean Se 60-63
(Co-authors R. H. Albrecht and R. I. Potter)
- HYLER, JOHN H.**
Tournamatic Drive for Tractors Ag 27
- JACOBSON CARL**
Supercharging of High Speed Diesels Ap 69-70
(Co-author Hans Bohuslav)
- JAKUST, C. C.**
Major Body Panels Jan 36-44
- JAMES, WILLIAM S.**
What Price Performance Jan 54-55
- JENNINGS, HENRY**
Operators' Experience with Truck Tubeless Tires Ag 66-67
- JESKA, R. D.**
Analog and Digital Computer Methods for Engineering Problems Jan 24-26
(Co-author R. A. Roggenbuck)
- JOHNSON, J. F.**
Friction Materials for Automatic Transmissions .. De 122
(Co-author E. P. Steff)
- JOHNSON, P. O.**
Automobile Body Loads Ap 45-49
- JOHNSON, R. L.**
Wear of Materials for High Temperature Dynamic Seals Se 46-50
(Co-authors M. A. Swikert and J. M. Bailey)
- JONACH, F. L.**
Mechanism of Engine Sludge Formation and Additives Action Ap 23
(Co-authors D. T. Rogers and W. W. Rice)
- JONES, MAJ. KENNETH L.**
A Customer's View of Turbine Engine Stall Oc 28-36
- JONN, KNUT**
Problems of Trans-Polar Operations De 114
- JORDAN, C. M.**
Euclid Twin Tractor Styling Fe 72-73
The Twin Crawler Takes Shape Fe 67-70
- JOY, T. J. P.**
Tires for High Performance Cars Mr 26-27
(Co-authors D. C. Hartley and D. M. Turner)
- KAMRASS, MURRAY**
Evaluation of the Noise Field Around Jet-Powered Aircraft Mr 63-69
(Co-author Karl D. Swartzel)
- KANGAS, PELL**
Air Filtration and Diesel Engine Wear—A Progress Report Je 132, 134, 136
- KAPLAN, DR. JOSEPH**
The International Geophysical Year De 48
- KASTELOWITZ, ADOLPH**
Forgings and Modern Fighter Airplane Producibility My 39-41
(Co-author C. R. Kramer)
- KELKER, STEPHEN E.**
New Burst of Capital Spending—New Challenge to Business Planning No 115-116
- KELLER, L. B.**
High-Quality Plastics Components for Use in Guided Missile and Airborne Radar Systems My 64-69
(Co-author W. Crofut)
- KELLEY, C. G.**
Techniques of Modern Manufacturing Management Oc 21
- KERLEY, R. V.**
Knocking Behavior of Fuels and Engines Ag 20-24
(Co-author K. W. Thurston)
- KIBBEE, LEWIS C.**
A Practical Approach to the Truck Noise Problem Fe 109-110
- KINCHIN, J. W.**
Fade and Stability in Automotive Brakes Je 40-45
- KINGSTON, L.**
Gas Turbine Transmissions Oc 40
- KIRCHNER, MARK E.**
Turboprop Airplane Control Problems Associated With Engine Failure Considerations Ap 56-59
- KIRK, RUFUS S.**
Rebuilding Ruined Roads with Machinery Oc 102
- KIRTLAND, H. C.**
Torqmatic Drive, Its Part in Easy Mobility Fe 67-70
- KLISCH, J. A.**
Winterization of Construction Equipment De 60-67
(Co-authors M. G. Mardoian, F. M. Baumgardner, T. H. Fones, W. W. Cornman, A. Q. Spitler, and P. W. Espenschade)
- KLOSS, RICHARD**
The High-Speed, Air-Cooled Diesel Engine—Past and Present No 112, 115
- KLOTSCH, PAUL**
Ford Studies Dynamics of Free Piston Gasifier .. Ag 58-59
(Co-author Gordon H. Millar)
- KOBY, A. W.**
Engine Temperature Control—Why—How No 124
(Co-authors D. R. Ferris and R. A. Weigel)
- KOEN, P. J.**
Control of Manufacturing Costs My 63, 69
- KOLK, F. W.**
Some Safety Aspects of Gas Turbines De 43
(Co-author M. G. Beard)
- KRAMER, C. R.**
Forgings and Modern Fighter Airplane Producibility My 39-41
(Co-author Adolph Kastelowitz)
- KREBS, R. P.**
Shaft Gas Turbines for Helicopters Mr 70-75
(Co-authors W. S. Miller, Jr. and T. C. Blaschke)
- KRIEGHOFF, R.**
Suppression of Jet Engine Noise During Ground Running De 57-59
(Co-author J. M. Tyler)
- KUCHER, A. A.**
Engineering 100 Years from Now Ag 17-18
- KUCHLER, T. C.**
High-Speed, High-Temperature Shaft Seals Se 46-50
(Co-authors J. W. Pennington and E. J. Taschenberg)
- LaDEW, CLIFFORD**
The Future of Welding Je 122, 124, 126
- LAHTI, A. K.**
The Next Decade and the Automobile Je 18-25
(Co-authors E. T. Vincent, F. L. Schwartz, Charles Lipson, Charles Harris, and U. O. Lahti)
- LAHTI, U. O.**
The Next Decade and the Automobile Je 18-25
(Co-authors E. T. Vincent, F. L. Schwartz, Charles Lipson, A. K. Lahti, and Charles Harris)
- LaMOTTE, R. R.**
The Allison Power Package for the Lockheed Electra Je 50-54
(Co-authors R. M. Hazen and Dimitrius Gerdan)

- LAMOUREUX, PAUL E.
New Materials for Today and the Future ... Oc 116, 118
- LANE, J. W.
Automotive Lubricants and Equipment Needs Ap 26
(Co-author Leonard Raymond)
- LARSSON, KARL H.
Turbine Powered Aircraft for the Future No 126
- LAURENCE, JAMES C.
Fundamental Investigation of Noise Generation by
Turbulent Jets JI 104, 106
(Co-author Newell D. Sanders)
- LAWRASON, G. C.
Application of Radioactive Tracers to Engine
Research Jan 50-53
(Co-authors A. Hundere and J. P. O'Meara)
- LEMAUX, D. F.
Temperature Control Fan Drive Oc 66-70
- LEWIS, C. R.
Electrical Contact Studies with Radioactive
Tracers Jan 50-53
- LIGHT, COL. EVERETT D.
Your Air Defense Ag 110, 112
- LINTON, T. R.
Materials and Processes for Tomorrow Je 67-69
- LIPSON, CHARLES
The Next Decade and the Automobile Je 18-25
(Co-authors E. T. Vincent, F. L. Schwartz, A. K.
Lahti, Charles Harris, and U. O. Lahti)
- LOENING, GROVER
Economics of Large Aircraft Ap 20-23
- LOFTIS, J. D.
The Jet Rocket Railroad Train No 28-29
- LOVE, W. B.
The New Studebaker Flared Cross-Rib Drum
Brake Je 40-45
(Co-author D. E. Hobson)
- LUCIA, C. J.
The Twin Ultramatic Transmission Fe 56-59
(Co-author J. Z. DeLorean)
- LUX, W. J.
A Billion Engine Hours on Aluminum Bearings .. Je 37-39
(Co-author R. S. Frank)
- MacGREGOR, GORDON A.
Use of Heavy Equipment in Logging Je 130
- MacKUSICK, W. P.
The Wide Base Tubeless Tire De 107
- MAHADEVAN, K.
Physical and Chemical Ignition Delay in an Operating
Diesel Engine Using the Hot-Motored
Technique De 38, 40-41
(Co-authors T. C. Yu, O. A. Uyehara,
P. S. Myers, and R. N. Collins)
- MALONE, G.K.
Relationship of Low-Temperature Cranking Resistance to
Viscosity Characteristics of Multigrade Oils .. Se 29-33
(Co-author T. W. Selby)
- MANNING, E. W.
Preventive Maintenance and Equipment
Replacements No 100, 102
- MARDOIAN, M. G.
Winterization of Construction Equipment De 60-67
(Co-authors F. M. Baumgardner, T. H. Fones, W. W.
Cornman, A. Q. Spittler, P. W. Espenschade,
and J. A. Klisch)
- MARKUS, JOHN
Building Reliability Into Aircraft Control Systems No 17-19
- MARTINUZZI, PROF. P. F.
Future Industrial and Commercial Uses for the Small Gas
Turbine Oc 43-44
- MASON, F. H.
Automotive Engineering Applications of Light
Metals Mr 62
(Co-author M. F. Garwood)
- MATHEWSON, J. H.
Technical Findings from Automobile Impact
Studies No 47-50
(Co-author D. M. Severy)
- MATHIAS, R. L.
Foreign Object Ingestion in Turbojet Engines Ap 112, 114
(Co-author H. E. Card)
- MATTHAEI, F. C., JR.
Developments in Seating De 114, 116
- MATTHEWS, A. F.
Complexities of Aircraft—Primarily Combat
Aircraft JI 102-104
- MAY, T. R.
Control of Manufacturing Costs My 62-63
- MAZZIOTTI, P. J.
Lower Silhouette Mr 46
(Co-author R. R. Burkhalter)
- McARDLE, J. G.
NACA Investigation of Thrust Reversal Techniques De 84
(Co-author J. H. Povolny)
- McBREARTY, J. F.
Fatigue and Fail Safe Airframe Design Je 26-29
- McCASLIN, H. C.
Multiwheel Drive Vehicles Fe 62
(Co-author G. W. Scharback)
- McCLURE, D. L.
How Do Volatility, Viscosity, and V.I. Improvers Affect Oil
Consumption Se 29-33
(Co-authors R. L. Overcash and W. Hart)
- McCONNELL, WILLIAM A.
Motion Sensitivity as a Guide to Road Design Oc 106
- McCULLUM, R. G.
Shell Molding Je 116
- McFADDEN, W. C.
Reconnaissance—More Than Meets the Eye . De 120, 122
- McFARLAND, FOREST
Automatic Transmissions—Past, Present, and
Future Oc 114
- McFARLAND, ROSS A.
Human Factors in Highway Transport Safety .. Ag 43-45
Human Problems in Jet Air Transportation No 51-52
- McLEOD, BEN F.
Integrated Flight Systems Ag 106
- McMANUS, RICHARD L.
Pneumatic vs. Mechanical Power Extraction for Aircraft
Accessories Ag 110
- McWHORTER, J. F.
Decorative Elastomeric Floor Covering for
Automobiles JI 104
- MEAD, HOWARD
New 4-Lamp Dual Sealed-Beam Roadlighting
System Oc 52-59
(Co-author Val J. Roper)
- MEDROS, RALPH
Production Planning for Product Availability De 120

- MEEK, D. O.
Rotary Air Compressors Ap 106, 108
- MEIER, J. H.
Effect of Rapid Load Changes on Torque Converter
Performance Se 95-96
(Co-author P. J. Swanson)
- MERTENS, WILLIAM C.
Automatic Transmission Gear Materials and Associated
Problems Oc 100, 102
(Co-author Frank Zuzich)
- MICHELL, W. P.
Drive Line and Axle Noise No 63
(Co-author W. E. Day)
- MILLAR, GORDON H.
Ford Studies Dynamics of Free Piston Gasifier . Ag 58-59
(Co-author Paul Klotzsch)
- MILLER, CHARLES M.
The Challenge of Cooperative Engineering in the Jet
Age Ap 34-35
- MILLER, M. M.
Sound and Furor—The Jet Noise Suppression Age . De 59
- MILLER, S. E.
Automotive Gasoline Injection Jan 61-66, Fe 27-35
- MILLER, W. S., JR.
Shaft Gas Turbines for Helicopters Mr 70-75
(Co-authors R. P. Krebs and T. C. Blaschke)
- MINES, C. E.
Cooperative Aeronautical Standards Mr 22-25
- MINGLE, J. G.
Radioactivity As a Sensitive Tool for Measuring Engine
Deposits Jan 50-53
(Co-authors H. W. Sigworth and B. A. Fries)
- MIZELLE, P. E.
Chassis Dynamometer Fe 20
(Co-authors J. C. Porter and A. R. Rescorla)
- MOCK, F. C.
Problems of Fuel Injection for Gasoline Automobile
Engines Jan 61-66
(Co-author W. C. Suttle)
- MOGUL, JEROME
Anti-friction Bearing Materials for Aircraft
Powerplants Se 56-59
(Co-authors John Preston and George Floroff)
- MOHR, JAMES W.
Noise and Vibration Reduction and Its Application to the
Outboard Motor Ag 40-42
- MOREHOUSE, REAR ADMIRAL A. K.
Your Air Defense Ag 106, 108
- MORELAND, JAMES P.
Field Testing of Parts and Supplies Oc 118, 120
(Co-authors Hyman Feldman and E. N. Hatch)
- MORRISON, R. S.
Matched Metal Die Molding Process Using
Preforms Jan 36-44
- MORROW, CHARLES T.
How Environmental Test Conditions and Their Combina-
tions Influence the Reliability of a Product Je 48
- MORROW, M. R.
Automotive Air Conditioners and Gasoline Volatility
Requirements De 111
- MORTENSEN, R. C.
Methods of Controlling Indirect Manufacturing Costs Ag 53
- MOSER, BERNARD P.
How to Live With MIL Specs Oc 72
- MOXEY, J. G.
A Recent Look at Some Problems Related to Gasoline
Volatility Se 71-73
(Co-authors W. P. Dugan, F. T. Finnigan,
and Gilbert Way)
- MOXEY, JOHN G., JR.
Multigrade Oils Se 96, 98
- MUENGER, J. R.
Road Vapor-Lock Incidence Ap 66-69
(Co-authors H. I. Wilson, R. S. Fein,
and R. S. Wetmiller)
- MYERS, P. S.
Fuel Vaporization and Ignition Lag in Diesel
Combustion De 38, 41-42
(Co-authors M. M. El Wakil and O. A. Uyehara)
Physical and Chemical Ignition Delay in an Operating
Diesel Engine Using the Hot-Motored
Technique De 38, 40-41
(Co-authors T. C. Yu, O. A. Uyehara, R. N. Collins,
and K. Mahadevan)
- NAVARIN, R. C.
Design and Ease of Maintenance Fe 110-112
(Co-author Karl H. Usow)
- NILSSON, L. U. G.
Goodyear Rolligon Tire—A New Approach to Vehicular
Mobility Ap 108, 110
(Co-author C. J. Ford)
- OCHS, R. C.
The Customers Point of View De 42-43
- OGDEN, E. B.
Operator's Experience With Repair and Recap of Truck
Tires Jl 37
Reconditioning of Vehicle Components; Condition vs. Mile-
age or Hours Mr 18
- OLLEY, MAURICE
Report on Suspensions for Commercial Vehicles Mr 54-58
- OLSEN, NORMAN
Impact Extrusion of Aluminum Oc 116
- O'MEARA, J. P.
Application of Radioactive Tracers to Engine
Research Jan 50-53
(Co-authors A. Hundere and G. C. Lawrason)
- ORNAS, THEODORE
Motor Trucks—Heavy Duty Plus Beauty Je 120, 122
- OSBORNE, R. E.
Present Status of Automatic Transmission Fluid,
Type A No 20-27
(Co-authors N. A. Hunstad and T. W. Selby)
- OTTO, HERBERT R., JR.
Dirt Proofing Engines with Positive Air Filtration .. Se 98
(Co-author John C. Cox)
- OVERCASH, R. L.
How Do Volatility, Viscosity, and V.I. Improvers Affect Oil
Consumption Se 29-33
(Co-authors W. Hart and D. J. McClure)
- OWEN, R. E.
The Experimental Chassis for the Firebird II Jl 49-52
(Co-author J. B. Bidwell)
- PALSULICH, JOSEPH
Dynamic Seals for Aircraft Gas Turbine Engines Se 46-50
(Co-author R. H. Riedel)
- PANTHOFER, E. H.
Cooling Problems Due to Mounted Equipment Ag 65
- PARKER, LT. JG. JAMES F.
The Visibility of Airport Runways Ag 108, 110
(Co-authors Capt. Norman Lee Barr and
Lt. JG. Thomas A. Hussman, Jr.)

- PARMET, NORMAN R.
Turbine Engine Overhaul Problems—A Challenge to the
Air Transport Industry Oc 104, 106
- PELIZZONI, W. J.
Mack END Thermodyne Diesel Se 118
- PENN, A. J.
Eland Engine and Its Application to Civil Air
Transport JI 36
- PENNINGTON, J. W.
High-Speed, High-Temperature Shaft Seals Se 46-50
(Co-authors T. C. Kuchler and E. J. Taschenberg)
- PERL, A. R.
Air Conditioning and Pressurization Equipment Require-
ments for High Performance Flight De 112, 114
(Co-author J. Hall Hood)
- PETERSEN, LUDVIG
Field Testing of Diesel Locomotives for Strain and
Performance Mr 99, 101
- PETERSON, C. R.
Problems Encountered in the Development of the B-52
Pneumatic Ducting System Fe 118, 120
- PETERSON, L. H.
A New Approach to Truck Design When Precedent Isn't a
Controlling Factor Ag 31-33
- PETHICK, G. A.
We Live in a World of Color Mr 118
- PFEIFFER, S. B.
Dynamic Landing Loads on Stores Se 100
- PIGOTT, R. J. S.
Where Did It Come From Je 130
- POCOCK, R. J.
Wear—Where and When Oc 48-51
- POLLOW, S. D.
The Growth of the Two Cycle Engine Mr 108, 110
- POMEROY, A. J.
Atomic Energy Opens New Horizons for Industry—New
Problems Too! Fe 18-20
- PORTER, J. C.
Chassis Dynamometer Fe 20
(Co-authors P. E. Mizelle and A. R. Rescorla)
- POTTER, D. V.
The New American Motors V-8 Engine JI 38-42
(Co-authors J. F. Adamson and C. E. Burke)
- POTTER, R. I.
STOP Sludge and GO Clean Se 60-63
(Co-authors R. H. Albrecht and Kent Hyatt)
- POVOLNY, J. H.
NACA Investigation of Thrust Reversal Techniques De 84
(Co-author J. G. McArdle)
- PREBLE, T. L.
Education for Automotive Engineering Se 99-100
(Co-authors E. C. Easton, Murray Simkins,
M. C. Horine, and R. L. Stanley)
- PRESTON, JOHN
Anti-friction Bearing Materials for Aircraft
Powerplants Se 56-59
(Co-authors Jerome Mogul and George Floroff)
- PRYATEL, F. J.
Tool Design, Tool Room, Methods Engineering—Their Re-
lationship to Manufacturing My 42-45
- R
- RANDALL, J. S.
Forum on Quality Control and Its Relation to Production
and Engineering Fe 122-123
- RANDALL, R. A.
Automotive Fuel Pumps—A Fundamental Study of Their
Performance De 84, 101
- RANTA, RAY
Service and Maintenance Features of Reo's New Gold
Comet V-8 Ap 19
(Co-author R. M. Tullos)
- RAWSON, C. B.
Power Train Compatibility Mr 49-51
- RAYBURN, F. M.
Landing Gear My 70-71
- RAYMOND, A. E.
The DC-8 Jet Transport Jan 31
- RAYMOND, LEONARD
Automotive Lubricants and Equipment Needs Ap 26
(Co-author J. W. Lane)
- REED, W. E.
A New Approach to Turbojet and Ramjet Engine
Control Fe 21-22
- REESE, WALLACE E.
The Role of Ground Operations in a Weapon
System De 104
- REINERS, N. M.
Turbocharging High-Speed, High-Output Diesel
Engines Ap 24-26
(Co-author W. E. Woollenweber)
- REMKE, R. W.
Jet Engines—What Price Power Se 100, 102
(Co-authors V. L. Schatz and A. L. Wynn)
- RENDEL, T. B.
Fuel Research JI 56-57
- RESCORLA, A. R.
Chassis Dynamometer Fe 20
(Co-authors P. E. Mizelle and J. C. Porter)
- REYNOLDS, CARL
Passenger Car Package Development is a Science . Je 112
- REYNOLDS, DAVID P.
Aluminum in Automobiles Fe 108
- REYNOLDS, H. A.
Effect of Fan Design on Cooling Index, Horsepower, and
Noise Oc 66-70
Radiator Cooling Development Oc 47
- RHOADS, P. J.
The New General Motors Hydra-Matic
Transmission Fe 42-49
(Co-author Kenneth W. Gage)
- RICE, W. W.
Mechanism of Engine Sludge Formation and Additives
Action Ap 23
(Co-authors D. T. Rogers and F. L. Jonach)
- RICHARDS, J. W.
Automobile Body Structures Ap 45-49
- RIEDEL, R. H.
Dynamic Seals for Aircraft Gas Turbine Engines Se 46-50
(Co-author Joseph Palsulich)
- ROBBINS, F. A.
Full-Scale Field Service Tests of Railroad Diesel
Fuels Ag 60-62
(Co-author R. W. Seniff)
Recent Developments in Piston Ring Design and
Application Se 51-53
- ROGERS, D. T.
Mechanism of Engine Sludge Formation and Additives
Action Ap 23
(Co-authors W. W. Rice and F. L. Jonach)

- ROGGENBUCK, R. A.
Analog and Digital Computer Methods for Engineering Problems Jan 24-26
(Co-author R. D. Jeska)
- ROPER, VAL J.
New 4-Lamp Dual Sealed-Beam Roadlighting System Oc 52-59
(Co-author Howard Mead)
- ROSE, B. A.
New Tools to Lick Aircraft Equipment Noise Problems De 77
- ROSE, MAURI
The Challenge of Stock Car Racing to the Automotive Engineer De 101, 103
- RYDER, EARLE A.
A Look at Some Turbine Bearing Problems Ap 114, 116, 118
(Co-author Gilbert C. Barnes)
- SANDERS, NEWELL D.
Fundamental Investigation of Noise Generation by Turbulent Jets Jl 104, 106
(Co-author James C. Laurence)
- SANDERSON, G. E.
Propeller Synchrophaser for Aircraft Noise Control Ap 50-53
(Co-author Charles B. Brahm)
- SAWYER, R. H.
Military Engine Concept Changes Ap 17-19
- SAWYER, R. TOM
Motive Power—Past and Future Oc 98
- SCHARBACK, G. W.
Multiwheel Drive Vehicles Fe 62
(Co-author H. C. McCaslin)
- SCHATZ, V. L.
Jet Engines—What Price Power Se 100, 102
(Co-authors A. L. Wynn and R. W. Remke)
- SCHLITT, HELMUT
Technological Barriers to Progress in the Field of Navigational Instrumentation De 124
- SCHMIDT, WILLIAM M.
How Low Is Low Oc 79-80
- SCHMUCKAL, R. P.
Rubber Has Dynamic Properties Too Ap 55
- SCHREYER, W. C.
Vibration-Testing Techniques for Large Specimens De 107, 109, 111
(Co-author Kenneth B. Yost)
- SCHROEDER, EVERETT H.
Development of a Cabin Pressure Control System for Transport Type Aircraft Jl 47
- SCHULTZ, W. G.
Design Factors to Be Considered Jan 36-44
- SCHWARTZ, CHARLES M.
Fatigue Failures Je 49
- SCHWARTZ, F. L.
The Next Decade and the Automobile Je 18-25
(Co-authors E. T. Vincent, Charles Lipson, A. K. Lahti, Charles Harris, and U. O. Lahti)
- SCHWEICH, P. A.
Engineering and Manufacturing Look at Flight Line Operation Se 33-34
- SCHWEITZER, PAUL H.
How "Free" Should a Free-Piston Gasifier Be .. Oc 22, 24
- SCOFIELD, P. C.
Auxiliary Power and Air Conditioning for the Self-Contained Airplane Fe 114, 116
(Co-author J. L. Bartlett)
- SEALE, HOMER T.
Air Breakaway Systems for Tractors and Trailers . Fe 112
- SEGEL, LEONARD
Research in the Fundamentals of Automobile Control and Stability De 68-72
- SELBY, T. W.
Present Status of Automatic Transmission Fluid, Type A No 20-27
(Co-authors N. A. Hunstad and R. E. Osborne)
Relationship of Low-Temperature Cranking Resistance to Viscosity Characteristics of Multigrade Oils ... Se 29-33
(Co-author G. K. Malone)
- SENIFF, R. W.
Full-Scale Field Service Tests of Railroad Diesel Fuels Ag 60-62
(Co-author F. A. Robbins)
- SEVERY, D. M.
Technical Findings from Automobile Impact Studies No 47-50
(Co-author J. H. Mathewson)
- SHAPPELL, N. H.
Control of Manufacturing Costs My 58-60
- SHIVELY, W. E.
Rubber on Wheels Se 41-43
(Co-author A. W. Bull)
- SIGWORTH, H. W.
Radioactivity As a Sensitive Tool for Measuring Engine Deposits Jan 50-53
(Co-authors J. G. Mingle and B. A. Fries)
- SIMKINS, MURRAY
Education for Automotive Engineering Se 99-100
(Co-authors T. L. Preble, E. C. Easton, M. C. Horine, and R. L. Stanley)
- SIMMONS, GARMON D.
Let's Tolerate the Tolerance My 85-89
- SIMPSON, W. J.
New and Improved Synthetic Elastomeric Materials for Automotive Use Mr 44-46
- SIMS, W. D.
Instrumentation for Valve Burning Studies Ap 53
- SMITH, COL. CLAUDE W.
Accelerated Service Testing of Turboprop Engines in USAF Test Bed Aircraft Je 128, 130
- SMITH, MAJOR-GEN. FREDERIC H., JR.
Your Air Defense Se 95
- SPAULDING, E. H.
Lightweight Springs for Limited Life Mr 19-21
- SPAULDING, J. F.
Purchasing Participation in the Technical Aspects of Manufacturing No 118
- SPEAR, A. G.
How a Car is Born De 103
- SPERRY, P. J.
Planet Power Steering as Applied to Crawler Tractors No 123
(Co-author R. J. Erisman)
- SPINDT, R. S.
Nitrogen Oxides, Combustion, and Engine Deposits Ap 120, 122
(Co-authors Court L. Wolfe and Donald R. Stevens)

- SPITLER, A. Q.**
Winterization of Construction Equipment De 60-67
(Co-authors M. G. Mardoian, F. M. Baumgardner,
T. H. Fones, W. W. Cornman, P. W.
Espenschade, and J. A. Klisch)
- SPLINTER, WILLIAM E.**
Mechanizing the Production of Tobacco Jan 110
(Co-authors Charles W. Suggs and Robert W. Wilson)
- SPROWLS, GEORGE M.**
How to Make Your Tires Help Your Business Ap 120
- SQUIER, W. W.**
Instrumentation in Fleet Maintenance Fe 116, 118
- STANLEY, R. L.**
Education for Automotive Engineering Se 99-100
(Co-authors T. L. Preble, E. C. Easton,
Murray Simkins, and M. C. Horine)
- STANLEY, R. M.**
Crew Survival in the Jet Age De 44-48
(Co-author R. J. Heymans)
- STAPP, LT.-COL. JOHN P.**
Human Factors of Supersonic Escape De 44-48
- STEFL, E. P.**
Friction Materials for Automatic Transmissions .. De 122
(Co-author J. F. Johnson)
- STEVENS, DONALD R.**
Nitrogen Oxides, Combustion, and Engine
Deposits Ap 120, 122
(Co-authors R. S. Spindt and Court L. Wolfe)
- STEVENS, J. B.**
Current Status of Axial-Face Seals Se 46-50
- STUKEY, A. E.**
Manufacturing Expense Control Ag 64-65
- STUMP, C. O.**
Quality Control and Producibility De 49-51
- SUCIU, DR. S. N.**
Design Requirements of a Good Combustion
System Oc 39-40
(Co-author H. A. Fremont)
- SUGGS, CHARLES W.**
Mechanizing the Production of Tobacco Jan 110
(Co-authors William E. Splinter and Robert W. Wilson)
- SUTTLE, W. C.**
Problems of Fuel Injection for Gasoline Automobile
Engines Jan 61-66
(Co-author F. C. Mock)
- SWALLOW, S. E.**
Automatic Transmission for Passenger Cars Fe 36-41
- SWANSON, P. J.**
Effect of Rapid Load Changes on Torque Converter
Performance Se 95-96
(Co-author J. H. Meier)
- SWARTZEL, KARL D.**
Evaluation of the Noise Field Around Jet-Powered
Aircraft Mr 63-69
(Co-author Murray Kamrass)
- SWAYNE, K. G.**
Zytel Nylon Resin and Teflon Tetrafluoroethylene Resin
as Bearing Materials Se 104, 106
(Co-authors A. J. Cheney and W. B. Happoldt)
- SWIKERT, M. A.**
Wear of Materials for High Temperature Dynamic
Seals Se 46-50
(Co-authors R. L. Johnson and J. M. Bailey)
- SWOBODA, LEO F.**
Materials and Processes for Tomorrow Jl 106-108
- TASCHENBERG, E. J.**
High-Speed, High-Temperature Shaft Seals Se 46-50
(Co-authors J. W. Pennington and T. C. Kuchler)
- TAUSSIG, W. A.**
Streamlined Maintenance Cuts Costs Jan 69-71
- TERRY, S. L.**
Headlining as Affected by Design and Styling
Requirements No 120, 123
- THOMAS, T. H.**
Combining the Features of Disc and Shoe Brakes Je 40-45
- THURSTON, K. W.**
Knocking Behavior of Fuels and Engines Ag 20-24
(Co-author R. V. Kerley)
- TIPTON, STUART G.**
Tomorrow's Magic Web Se 22-23
- TOWLE, GEORGE**
A Jet Exhaust Silencer Jan 67-68
(Co-author John Tyler)
- TULLOS, R. M.**
Service and Maintenance Features of Reo's New Gold
Comet V-8 Ap 19
(Co-author Ray Ranta)
- TURNER, D. M.**
Tires for High Performance Cars Mr 26-27
(Co-authors T. J. P. Joy and D. C. Hartley)
- TURUNEN, W. A.**
The Regenerative Whirlfire Engine for
Firebird II Jl 48, 52-54
(Co-author J. S. Collman)
- TUTWILER, T. S.**
Cold Starting with V.I. Improved Multigrade
Oils Se 29-33
(Co-authors F. B. Fischl and H. H. Horowitz)
- TYLER, J. M.**
Suppression of Jet Engine Noise During Ground
Running De 57-59
(Co-author R. Krieghoff)
- TYLER, JOHN**
A Jet Exhaust Silencer Jan 67-68
(Co-author George Towle)
- UNDERWOOD, A. F.**
A Concept of the Free Piston Engine for Automotive
Use Je 60-66
How "Free" Should a Free-Piston Gasifier Be Oc 23
- USOW, KARL H.**
Design and Ease of Maintenance Fe 110-112
(Co-author R. C. Navarin)
- UYEHARA, O. A.**
Fuel Vaporization and Ignition Lag in Diesel
Combustion De 38, 41-42
(Co-authors M. M. El Wakil and P. S. Myers)
Physical and Chemical Ignition Delay in an Operating
Diesel Engine Using the Hot-Motored
Technique De 38, 40-41
(Co-authors T. C. Yu, P. S. Myers, R. N.
Collins, and K. Mahadevan)
- VALENTINE, B. G.**
The John Deere Model 70 Tractor Diesel Engine Jan 47-49
(Co-author Russell Candee)
- VANDERCOOK, W. W.**
The Driver and His Influence on Maintenance
Cost Fe 124, 126

- VINCENT, E. T.
The Next Decade and the Automobile Je 18-25
(Co-authors F. L. Schwartz, Charles Lipson, A. K. Lahti, Charles Harris, and U. O. Lahti)
- WALTERS, F. C.
Farm Tractors and Their Tires JI 75-79
(Co-author W. H. Worthington)
- WANTIN, R. W.
Automatic Fan Control Oc 66-70
- WARREN, J. A.
New Instrumentation for Engine Combustion Studies Se 112, 114
(Co-author J. B. Hinkamp)
- WAY, GILBERT
A Recent Look at Some Problems Related to Gasoline Volatility Se 71-73
(Co-authors W. P. Dugan, F. T. Finnigan, and J. G. Moxey)
- WAY, LT. J. H.
Correlation Between Laboratory and Engine Performance of Synthetic Turbine Lubricants Se 102
(Co-author T. F. Davidson)
- WEIGEL, R. A.
Engine Temperature Control—Why—How No 124
(Co-authors D. R. Ferris and A. W. Koby)
- WELLER, E. F.
Instrument for Recording Cylinder Pressure versus Crank Angle of Internal-Combustion Engine .. Se 108, 110, 112
(Co-author R. R. Bockemuehl)
- WELLINGTON, JOSEPH C., JR.
Communications De 54-56
- WETMILLER, R. S.
Road Vapor-Lock Incidence Ap 66-69
(Co-authors H. I. Wilson R. S. Fein, and J. R. Muenger)
- WHEATLEY, JOHN B.
The Allison T56 Turboprop Aircraft Engine Fe 23-26
(Co-authors D. G. Zimmerman and R. W. Hicks)
- WHITE, P. C.
Future Gasolines for Future Engines Se 54-55
(Co-authors A. P. Boyd and C. J. Domke)
- WICHSER, R. F.
The Role of Testing in Modern Military Aircraft Design Mr 116, 118
- WILE, L. E.
Shell Molding No 53-55
- WILLIAMS, R. C.
Euclid's TC-12 Twin Crawler Tractor Fe 71-72
Twin Power for Easy Mobility Fe 67-70
- WILLIAMS, WALTER C.
Flight Research at High Altitudes and High Speeds with Rocket-Propelled Research Airplanes Ag 54-57
- WILSON, H. I.
Road Vapor-Lock Incidence Ap 66-69
(Co-authors R. S. Fein, J. R. Muenger, and R. S. Wetmiller)
- WILSON, ROBERT W.
Mechanizing the Production of Tobacco Jan 110
(Co-authors William E. Splinter and Charles W. Suggs)
- WOLFE, COURT L.
Nitrogen Oxides, Combustion, and Engine Deposits Ap 120, 122
(Co-authors R. S. Spindt and Donald R. Stevens)
- WOODS, R. J.
Convertiplanes and Other VTOL Aircraft JI 68-74
- WOOLLENWEBER, W. E.
Turbocharging High-Speed, High-Output Diesel Engines Ap 24-26
(Co-author N. M. Reinert)
- WORTHINGTON, W. H.
Farm Tractors and Their Tires JI 75-79
(Co-author F. C. Walters)
- WYNN, A. L.
Jet Engines—What Price Power Se 100, 102
(Co-authors V. L. Schatz and R. W. Remke)
- YOST, KENNETH B.
Vibration-Testing Techniques for Large Specimens De 107, 109, 111
(Co-author W. C. Schreyer)
- YOUNG, H. D.
Future Fuel Trends in the Farm Tractor Field De 77
- YOUNG, JOHN D.
Automotive Applications for Zytel Nylon Resin Fe 108-109
- YU, T. C.
Physical and Chemical Ignition Delay in an Operating Diesel Engine Using the Hot-Motored Technique De 38, 40-41
(Co-authors O. A. Uyehara, P. S. Myers, R. N. Collins, and K. Mahadevan)
- ZIMMERMAN, CHARLES H.
Some General Considerations Concerning VTOL Aircraft JI 68-74
- ZIMMERMAN, D. G.
The Allison T56 Turboprop Aircraft Engine Fe 23-26
(Co-authors John B. Wheatley and R. W. Hicks)
- ZUZICH, FRANK
Automatic Transmission Gear Materials and Associated Problems Oc 100, 102
(Co-author William C. Mertens)